

ACO Accelerated Development Learning Session

San Francisco, CA
September 15-16, 2011

Module 3A: Connecting Providers and Managing High-Risk Patients



September 16, 2011
8:15–10:15 a.m.

Patrick Gordon, MPA, Director
Julie Schilz, BSN, MBA, Director, Community Collaborative
Marc Lassaux, BS, CMSIS, Technical Director
Colorado Beacon Consortium

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Colorado Beacon Consortium

- One of 17 HHS/ONC “Beacon Communities” charged with demonstrating the effect of investment in health information technology (HIT) in improved process and outcomes
- Longstanding, but informal, community collaborators in Western Colorado (Grand Junction and surrounding rural and frontier regions)
- Community-wide consortium, sponsored by four independent partners: Rocky Mountain Health Plans, Quality Health Network (HIE), Mesa County Physicians IPA, and St. Mary’s Hospital and Regional Medical Center



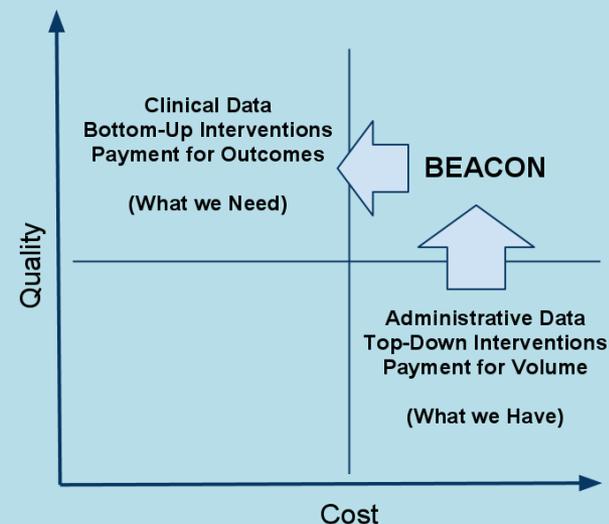
Colorado Beacon Consortium

- Population
 - 320,000 total residents
 - 30% < 250% federal poverty level
 - 25% adults (18–64) uninsured
- Providers
 - 107 primary care groups
 - 12 hospitals
 - 3 large IPA/PHO orgs
 - 827 total practitioners (all specialties and mid-levels)
- Payers
 - Rocky Mountain Health Plans
 - 60% Medicaid
 - 40% Medicare
 - 40% Commercial
 - Aggregate risk shared with IPAs and PHOs
 - Other Fee for Service and government payers

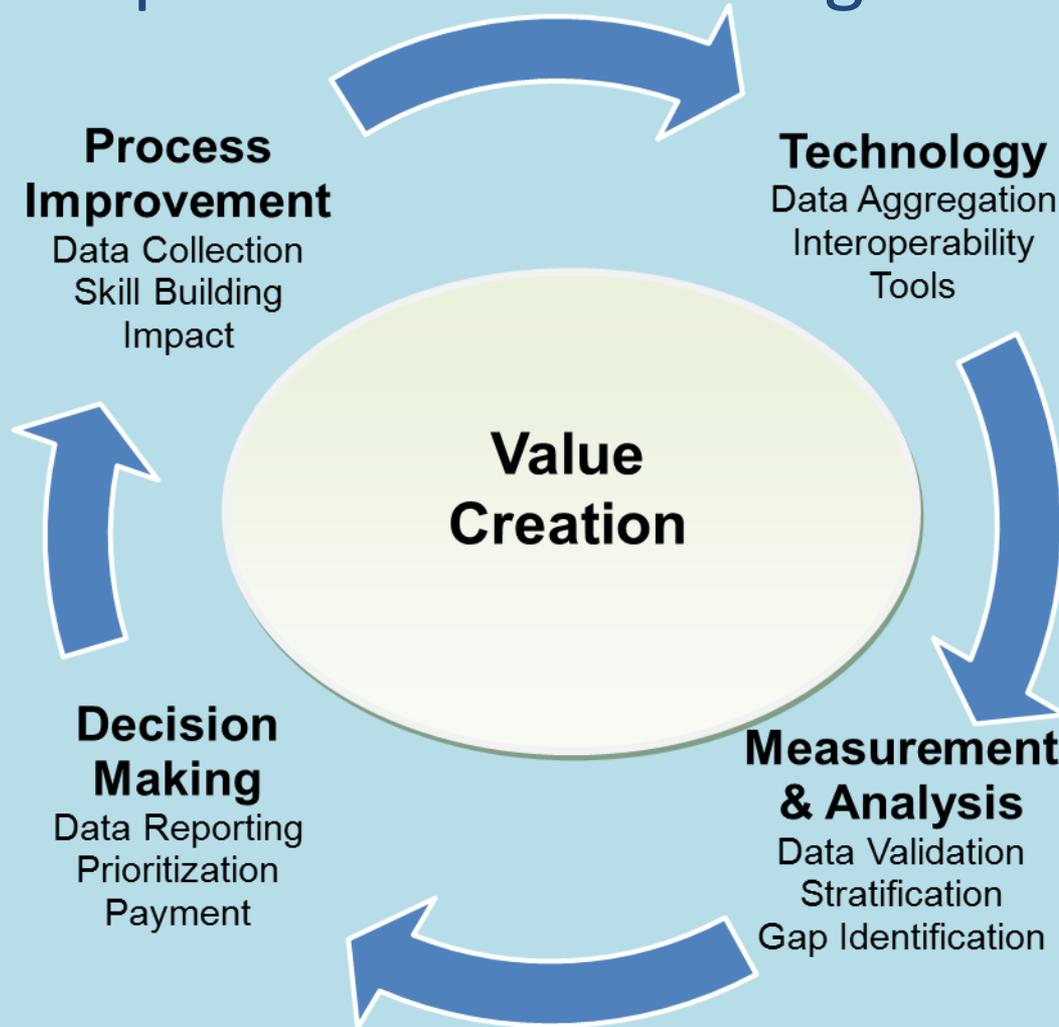


Colorado Beacon Consortium

- Improve efficiency and performance within existing resources
- Transform our “collaborative culture” to create a more systemic relationship between measurement, analysis, and change processes
- Increase motivation among providers and other participants for continual improvement
- Promote the formation of self-directing “Medical Neighborhoods”



Four Key Elements of Improvement and Integration



Identification of High-Risk Patients and Prospective Modeling

Discussion Overview

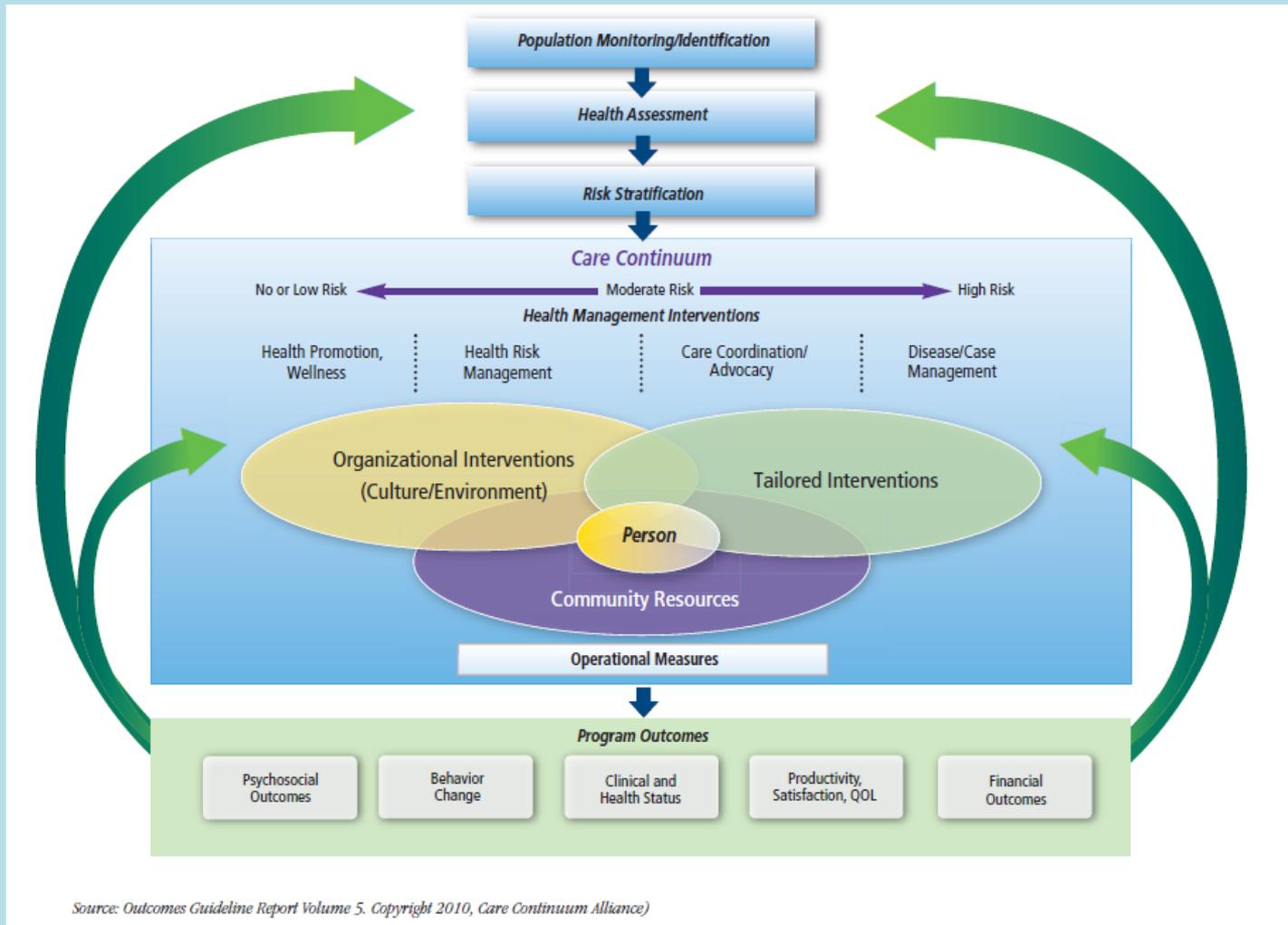
- Core questions
- Further considerations
- Where to start

Identification of High-Risk Patients and Prospective Modeling *continued*

Why Identify Risk and Stratify Patients?

- To support care coordination activities
- To target resources more effectively (scarce or not)
- To engage and activate patients in changing behavior
- For comparative effectiveness and/or financial objectives
- *All of the above?*

Identification of High-Risk Patients and Prospective Modeling *continued*



Identification of High-Risk Patients and Prospective Modeling *continued*

- More Critical Questions:
 - On which populations will you focus?
 - How do you know whether all patient risks are reflected in your measurement process? Which risks will be omitted and what is the impact?
 - How much credence do you place in the contemporary predictive modeling tools and methods? Will others feel the same way?
 - What will you do when patient risk is identified and ranked?
 - How will you communicate with patients about the risks you identify?
 - Who are your external partners in this process?

Identification of High-Risk Patients and Prospective Modeling *continued*

Build a Logic Model First

	Quadrant 1	Quadrant 2	Quadrant 3	Quadrant 4
Diagnostic Complexity	Low Physical / Low Behavioral	Low Physical / High Behavioral	High Physical / Low Behavioral	High Physical / High Behavioral
Heightened Risks	Accident, Disease, Disability	Accident, Disease, Disability, Major Event / Mortality	Major Event / Mortality	Major Event / Mortality
Patient Characteristics	Not Diagnostically Complex Higher Functional Ability	Major Psych Diagnosis Lower Functional Ability	Major Physical Diagnosis Lower Functional Ability	Major Physical and Psych Co-Morbidities, Lowest Functional Ability
Frequent Confounding Factors	Unhealthy Behavior Lower-Scale Depression Chronic Pain Substance Abuse	Unhealthy Behavior Chronic Pain Substance Abuse Isolation Difficulty Utilizing Primary Care	Unhealthy Behavior Lower-Scale Depression Chronic Pain Substance Abuse	Unhealthy Behavior Chronic Pain Substance Abuse Isolation Difficulty Utilizing Primary Care
Clinical Focus	Behavior Change Pain Management Addiction Disorder	Care Coordination Medication Adherence Behavior Change Pain Management Addiction Disorder Primary Care Access	Care Coordination Medication Adherence Behavior Change Pain Management Addiction Disorder	Care Coordination Medication Adherence Behavior Change Pain Management Addiction Disorder Primary Care Access
Time Horizon for Outcomes	Longer Term	Longer Term	Near Term	Near Term
Planned Interventions	Depression Screening Substance Abuse Screening Motivational Interviewing Patient Coaching Pain Protocols	Multidisciplinary Case Mgt Substance Abuse Screening Patient Coaching Navigator Services Pain Protocols	Multidisciplinary Case Mgt Depression Screening Substance Abuse Screening Motivational Interviewing Patient Coaching Pain Protocols	Multidisciplinary Case Mgt Substance Abuse Screening Motivational Interviewing Patient Coaching Navigator Services Pain Protocols
Additional Coordinated Therapy (When Necessary)	Substance Abuse Treatment Short-Term Therapy	Substance Abuse Treatment	Substance Abuse Treatment Short-Term Therapy	Substance Abuse Treatment
Diagnostic Complexity	Low Physical / Low Behavioral	Low Physical / High Behavioral	High Physical / Low Behavioral	High Physical / High Behavioral

Identification of High-Risk Patients and Prospective Modeling *continued*

- Do you have access to the scope and depth of discrete data necessary to support your interventions and goals?
 - Administrative data
 - Clinical data
 - Demographic data
 - Assessment and screening data
 - Care planning information
- Do you have access to the *analytic* support required to understand and validate results?
- Do you have the *operational* support required to maintain real-time data for feedback and clinical decision support?

Identification of High-Risk Patients and Prospective Modeling *continued*

What Are Your Resources?

Success Factor	ACO Maturity		
	Early	Developing	Mature
I. ACO Member Engagement	Episode of care Call center support	Pre-care intervention; Member outreach; Social media (one to one)	Prevention; Lifestyle consultation; Remote monitoring; Social media (many to many)
II. Cross Continuum Medical Management	Case management	Care coordination; Patient centered medical home	Disease management; Health maintenance
III. Clinical Information Exchange	Static; Read-only access; User request-based	Pushed (automatic); Continuity of care documents	Real time sharing across all venues; Patient access
IV. Quality Reporting	EHR (meaningful use stage 1)	EHR (meaningful use stages 2 and 3)	Real-time, dashboard/desktop, ad hoc reporting
V. Business Intelligence, Predictive Modeling and Analytics	Patient focused; Episode/encounter focused data; Retrospective; Clinical and financial	Population-based; Continuum of care data; Predictive health analytics	Social and network data; Behavioral analytics; Real-time
VI. ACO Risk and Revenue Management	Cost accounting across the continuum of care; Membership data management	Provider network management; Global contracting; Allocation of payment	Capitation management

Enders, Battani, Zywiak, *Health Information Requirements for Accountable Care*. Computer Sciences Corp, 2010.

Tools and Resources

Partners, resources, and roles? Who, what, and how:

- Determine and update care coordination needs
- Create and update a proactive plan of care
- Communicate: **PCMH**
 - Between health care professionals & patients/family
 - Within teams of health care professionals
 - Across health care teams or settings
- Facilitate transitions
- Connect with community resources
- Align resources with population needs **ACO**

Fisher, Elliot; Grumbach, Kevin; Meyers, David, et al. Unpublished, September 8, 2010. Consensus Meeting Briefing Materials on Care Coordination: Issues for PCMHs and ACOs.

Impact of these Activities on Quality, Use, and Expenditures

- Why measure?
 - To improve skill
 - To improve outcomes
 - For accountability
- Measure – at what level?
 - Population level
 - Patient level
 - System operations
- Getting to Value

Impact of these Activities on Quality, Use, and Expenditures *continued*

Current CBC Measures

Chronic Care Processes

- Diabetes Short Term Complications (PQI #1)
- Diabetes Long Term Complications (PQI #3)
- Diabetes BP Management Rate (NQF 0061)
- Uncontrolled Diabetes Admission Rate (PQI #14)
- Diabetes hbA1c Poor Control (NQF 0059)
- Hypertension Admission Rate (PQI #14)
- Asthma Admission Rate (PDI #14)
- Use of Appropriate Meds / Asthma (NQF 0036)
- IVD Lipid Panel and LDL Control (NQF 0075)

Prevention & Population Health

- Breast Cancer Screening (NQF 0031)
- Childhood Immunizations Status (NQF 0038)
- Tobacco Assessment & Intervention (NQF 0028)
- Adult Weight Screening and Follow-Up (NQF 0421)
- Weight Assessment & Follow-Up (Kids -NQF 0024)

Costs

- Emergency Room Utilization (HEDIS)
- Inpatient Re-Admission Rates \leq 30 Days (HEDIS)

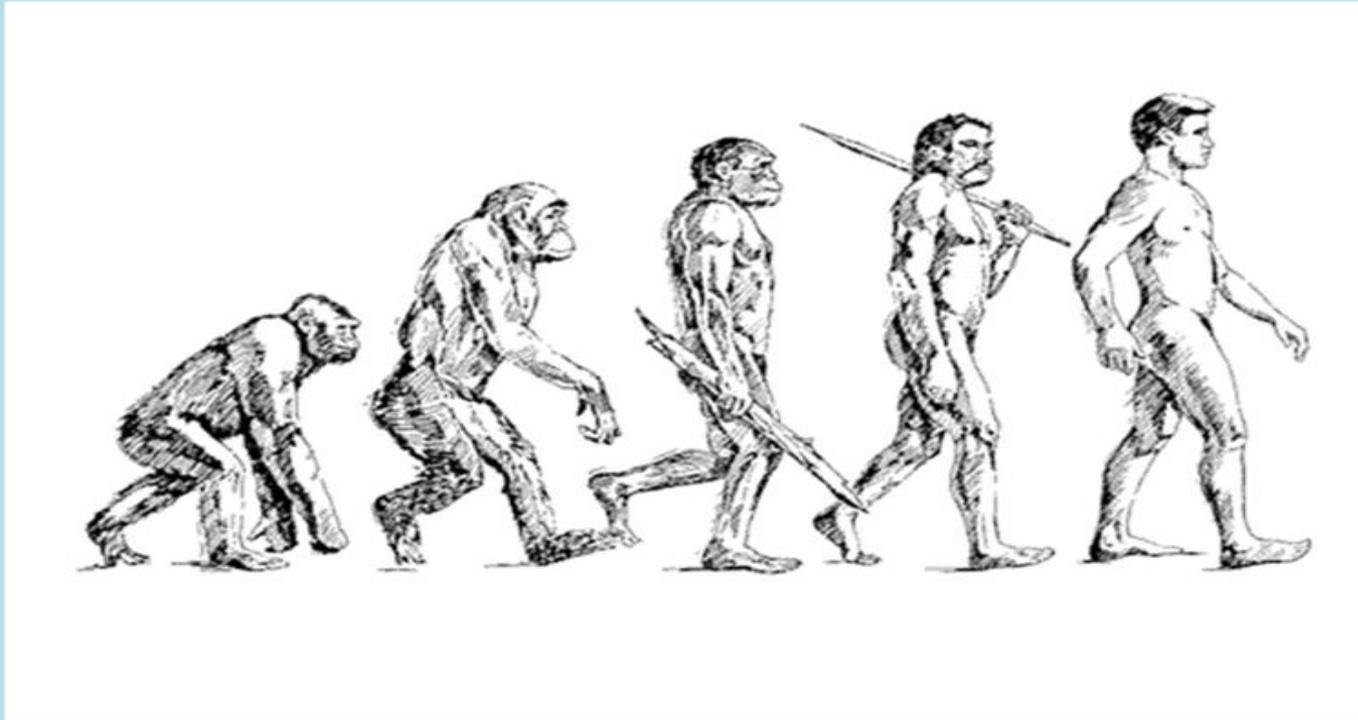
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Impact of these Activities on Quality, Use, and Expenditures *continued*

Quantitative Indicators

- *Population Measures* – Longitudinal, practice-specific improvements over validated baselines
- *Patient Measures* – Reduction of individual patient risk scores, improvement over time on assessments and screens
- *Cost Measures* – Appropriate utilization of services, benchmarks, and budget targets
- *Operational Measures* – E.g., increased participation, transaction volume, and data aggregation within health information exchange (HIE)

Impact of these Activities on Quality, Use, and Expenditures *continued*



Surveillance Accountability Improvement Value

*Jim Chase, President, MN Community Measurement

Impact of these Activities on Quality, Use, and Expenditures *continued*

Getting to Value

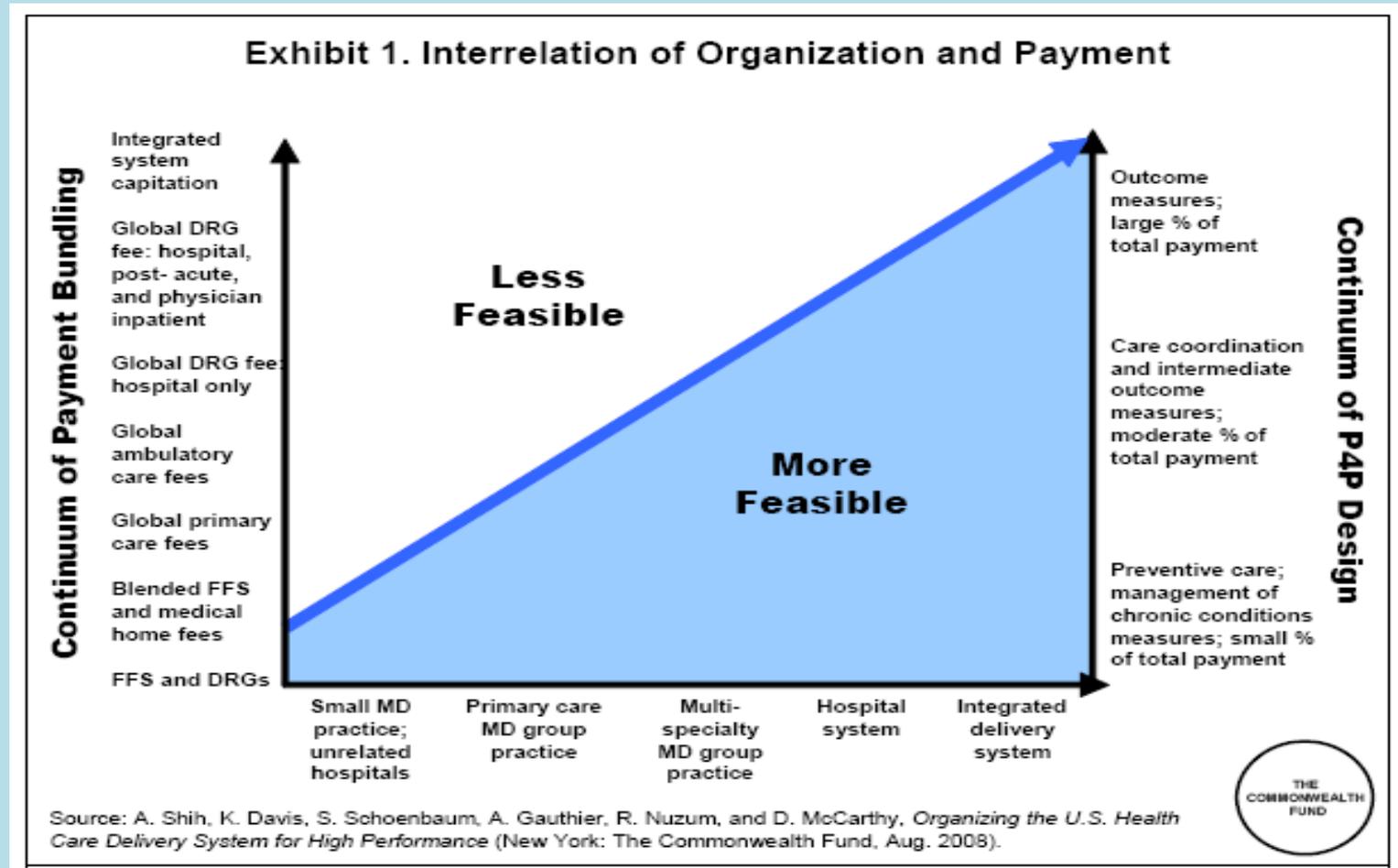
- Few measures correlate activities with measured reductions in patient health risk and avoided costs
- Numerous confounding human and system variables make the assessment of value difficult
- A *prospective* approach can actuarially link the performance on specific measures of performance occurring over a short prospective time horizon (3–5 years)
- Trend-specific linking can support performance bonus award based on a percentage of the reduced rate of cost growth (e.g., BCBS of Mass *Alternative Quality Contract* and Colorado Medicaid *Net Present Value* pool)

Impact of these Activities on Quality, Use, and Expenditures *continued*

Clinical Decision Support Tools and Patient-Level Measures

- Emerging, advanced clinical decision support technologies and modeling methods, which document behavior data (e.g., medication adherence and smoking) and quantify multiple risks and improvement opportunities
- Designed to account for multiple, continuous health risks as well as benefits (treatment and behavior change interventions), and quantify the likelihood of prospective adverse events
- May provide more effective support for provider incentive arrangements that are focused on behavior change, particularly in smaller-scale care settings

Impact of these Activities on Quality, Use, and Expenditures *continued*



Impact of these Activities on Quality, Use, and Expenditures *continued*

Elements of an Ideal Payment System

- Reduced disparity between cognitive and procedural services
- Reduced dependency on volume
- Provides support for technology, infrastructure, and “in-between visit” care
- Rewards desired outcomes and is not just limited to readily measured performance
- Risk-adjusted / accounts for variation in patient health status
- Rewards are not limited exclusively to cost containment; must also recognize the value that quality creates
- Encourages/depends on coordination among all providers in the care continuum
- Multi-payer in nature (not “one off”) and rewards best practices

– Diane Rittenhouse, MD, MPH



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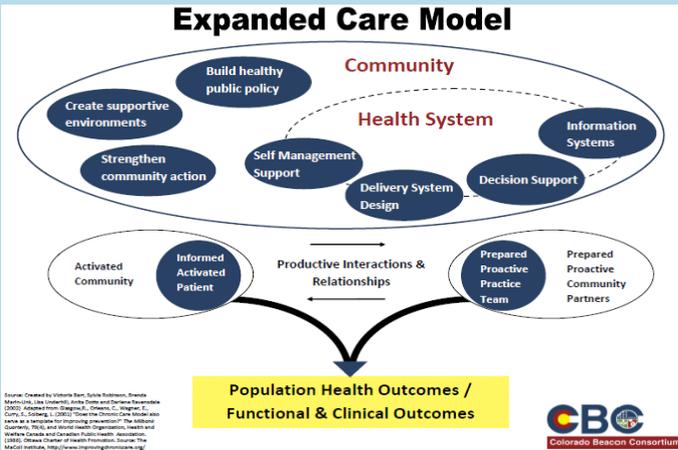
Objectives for the Learning Module

1. Coordinating care and managing care transitions
 2. Strategies and resources required to connect providers
- Understand how to implement components of Population Health Management
 - Primary Care Transformation
 - Data Analysis Methods for Population Health
 - Care Coordination
 - The Medical Neighborhood
 - Care Transition Models
 - NCQA PPC-PCMH Recognition
 - Colorado Beacon Consortium Transformation Program
 - ACO and Care Delivery Case Studies
 - Integrated Physician Network
 - Fairview
 - Camden Coalition of Healthcare Providers

Why We Need Accountable Care

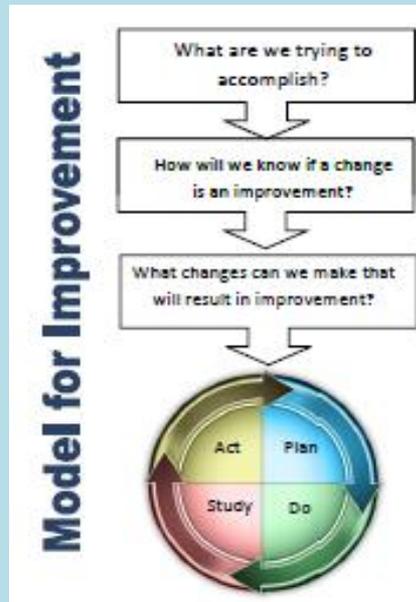
- To Err is Human
<http://www.iom.edu/Reports/1999/To-Err-is-Human-Building-A-Safer-Health-System.aspx>
- Crossing the Quality Chasm
<http://www.iom.edu/Reports/2001/Crossing-the-Quality-Chasm-A-New-Health-System-for-the-21st-Century.aspx>
- The Quality of Health Care Delivered to Adults in the United States
<http://www.nejm.org/doi/pdf/10.1056/NEJMsa022615>
- U.S. Ranks Last Among Seven Countries on Health System Performance Measures
<http://www.commonwealthfund.org/Newsletters/The-Commonwealth-Fund-Connection/2010/June-25-2010.aspx>
- The Commonwealth Fund Survey: 72 Percent in U.S. Think Health System Needs Major Overhaul
<http://www.commonwealthfund.org/Newsletters/The-Commonwealth-Fund-Connection/2011/Apr/April-15-2011/Whats-New/72-Percent-in-US.aspx>
- Barbara Starfield: Passage of the Pathfinder of Primary Care The Attributes of Primary Care
<http://www.annfamned.org/cgi/reprint/9/4/292>
- Center for Healthcare Quality and Payment Reform Harold Miller
<http://www.chqpr.org/downloads/HowtoCreateAccountableCareOrganizations.pdf>

Guiding Principles



Institute for Health Care Improvement Triple Aim:

- Improve the health of the population
- Enhance the patient experience of care (including quality, access, and reliability)
- Reduce, or at least control, the per capita cost of care



Six Aims of the Institute of Medicine:

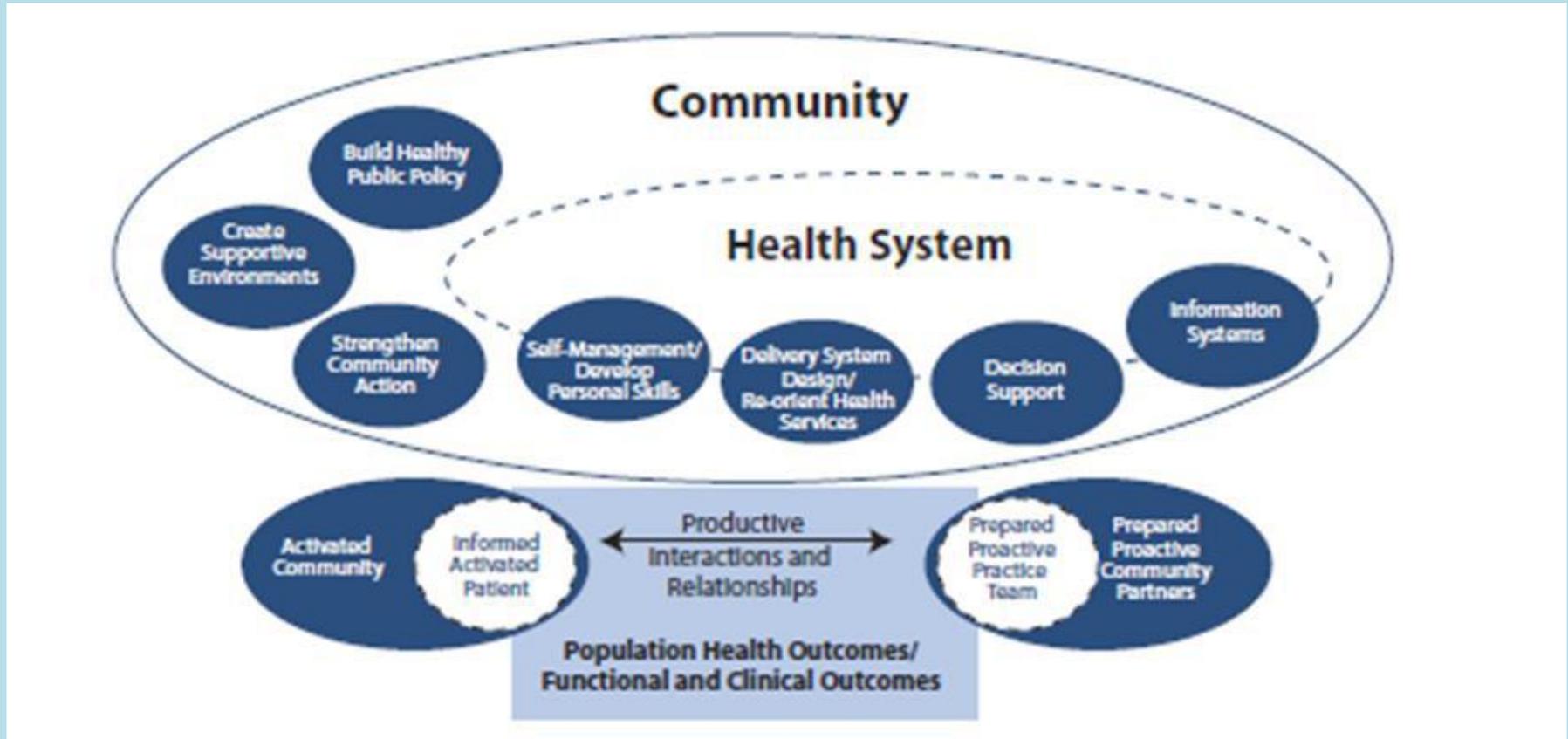
- Safe** – avoiding injuries to patients from the care that is intended to help them
- Effective** – providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoid underuse and overuse, respectively)
- Patient-centered** – providing care that is respectful of and responsive to individual patient preferences, needs and values and ensuring that patient values guide all clinical decisions.
- Timely** – reducing waits and sometimes harmful delays for both those who receive and those who give care
- Efficient** – avoiding waste, including waste of equipment, supplies, ideas, and energy
- Equitable** – providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status

www.ihl.org
www.iom.org
www.improvingchroniccare.org

Building a Transformation Program

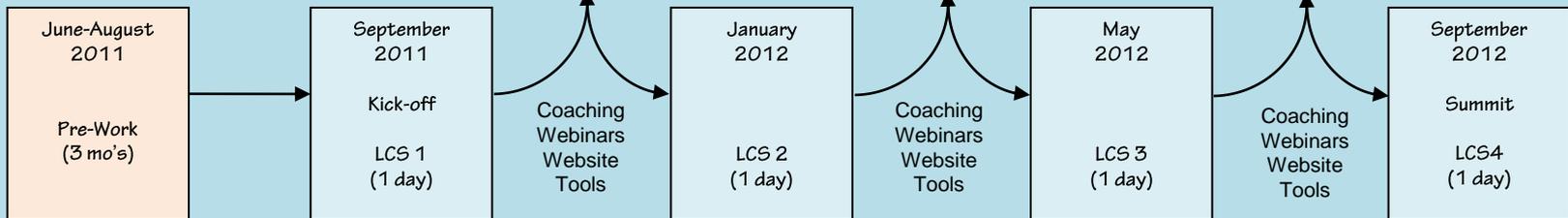
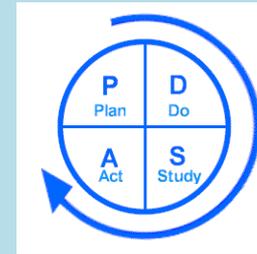
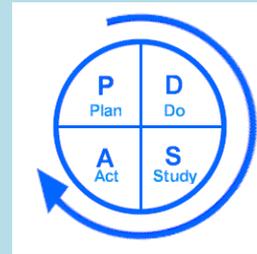
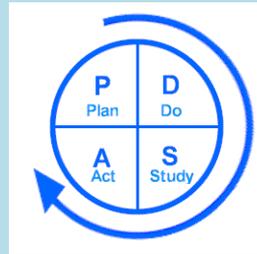
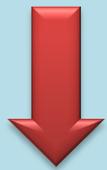
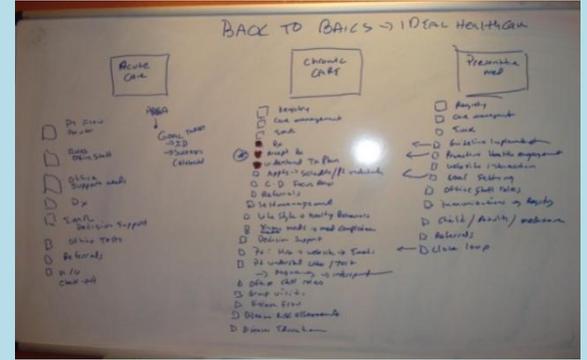
- Engage health and health care community in creating your program ... and don't forget the patients
- Create sustainability in the process
- Use Lean Quality Principles to remove waste and create space for new more productive processes
- IHI Breakthrough Series Learning Collaboratives
<http://www.ihl.org/knowledge/Pages/IHIWhitePapers/TheBreakthroughSeriesIHIsCollaborativeModelforAchievingBreakthroughImprovement.aspx>
Aim, measures, change package, reporting structure, resources for success
- Sample Learning Collaborative Materials from ICIC and HRSA
http://www.improvingchroniccare.org/index.php?p=BTS_Collaborative_Training_&_Materials&s=373
<http://healthcarecommunities.org/>
- Quality Improvement Coaching/Advisors/Facilitators
http://www.improvingchroniccare.org/index.php?p=Practice_Coaching&s=242

Enhanced Care Model Diagram



Barr, V., et al. *Hospital Quarterly*, Vol. 7, No. 1, 2003, pp. 73 –82.

Pre-Work, Learning Sessions, and Action Periods



Webinars:
Team Formation
Registry
Storyboard
Measures



Action Period



Colorado Beacon Consortium



T eams
A re
R eaching
G oals
E very
T ime

Practice Transformation Program Guiding Principles

- IHI Triple Aim
- IOM Six Aims

Program Methodology

- Care Model
- Model for Improvement
- Performance Improvement
- QIAs and Learning Collaboratives

Time Frame and Goals

- One Year with Advisors and Learning Collaboratives
- Close the Gap by 50% from Baseline Measures
- Improve Value – Team, Evidence-Based Guidelines, Patient-Centered, HIE/HIT



CBC Change Package

- Performance Improvement
 - Choose a measure
 - Determine a baseline
 - Evaluate your performance
 - If performance is not what you would like, develop a performance aim
 - Make changes to improve performance
 - Monitor performance over time
- Use Quality Improvement Tools, Models, and Resources
 - Review and use the Expanded Care Model (a.k.a. Care Model)
 - Review and use the Model for Improvement
 - Team-based care delivery
 - Monthly measure and narrative reporting
 - Community learning collaborative
 - Quality improvement advisors
- High-Leverage Changes
 - Registry functionality (stand-alone or as part of the electronic health record [EHR])
 - Use planned care templates and protocols
 - Self-management support
 - Maximize health information technology
- Optional Practice Transformation Initiatives based on the Enhanced Care Model

Using Data for Knowledge ... and Outcomes!

- Determine your measures
 - Population of focus – what is the greatest need and opportunity?
 - Process? Outcome? Both?
 - Is there an unintended consequence? Do you need a balancing measure?
- Measure and review data monthly
 - Is the registry up to date?
 - Is there confidence in the reporting?
 - Are their patient outliers who could have targeted outreach?
 - Are their care team factors? What systems need to be established— protocols or planned care, etc.?

Using Data for Knowledge ... and Outcomes!

Part II

- What is the data saying?
 - Positive trend
 - No movement
 - Initial progress and now flat
- Determine interventions
 - Are there health system Issues (cost of copay, access)
 - Devise plan for how to keep the registry up to date, standardized documentation
 - Are their patient outliers? Use the following messaging: “These patients are not receiving optimal care—why?”
 - Are there care team factors? What systems need to be established?
- Report the data. Be Transparent.

IHI's Improvement Tracker

<http://app.ihi.org/Workspace/tracker/>

A User's Manual for the IOM's "Quality Chasm" Report, by Donald Berwick, MD

<http://content.healthaffairs.org/content/21/3/80.full.pdf>

Care Coordination

- Managing referrals and services that happen outside of the practice
- Utilize community resources—public health, health plan, recreation centers, faith-based organizations
- Care protocols for high-risk patients, i.e., focused visits, care management, health coaching, etc.
- Create work flows for high-leverage scenarios—behavioral health, poly pharmacy, co-morbidities, social determinates of health, post-ER visits and/or discharges
- Communicate and collaborate with the patient and family

Care Coordination Resources

- Care Coordination Tool Kit
http://www.improvingchroniccare.org/index.php?p=Care_Coordination&s=32
- SafetyNet Medical Home Initiative Change Package
<http://www.qhmedicalhome.org/safety-net/carecoordination.cfm>
- PCMH-Neighbor
http://www.acponline.org/advocacy/where_we_stand/policy/pcmh_neighbors.pdf
- PCMH-Neighbor Checklists
http://www.acponline.org/running_practice/pcmh/understanding/specialty_physicians.htm
- Colorado Medical Society Primary Care-Specialty Compact
<http://www.cms.org/strategic-priorities/practice-viability/systems-of-care/patient-centered-medical-home-initiative/>

Care Transition Models and Resources

- Care Transitions Model (Eric Coleman)
http://www.caretransitions.org/ctm_main.asp
- Transitional Care Model (Mary Naylor)
http://www.innovativecaremodels.com/care_models/21/leaders
- Staar
<http://www.patientcarelink.org/Improving-Patient-Care/ReAdmissions/STate-Action-on-Avoidable-Rehospitalizations-Initiative-STAAAR.aspx>
- ReEngineered Discharge
<http://www.ahrq.gov/news/kt/red/redfaq.htm>
- Colorado Foundation for Medical Care (CFMC)
<http://www.cfmc.org/caretransitions/>
- BOOST
http://www.hospitalmedicine.org/ResourceRoomRedesign/RR_CareTransitions/html_CC/project_boost_background.cfm
- CMS Discharge
<http://www.medicare.gov/publications/pubs/pdf/11376.pdf>

NCQA PCMH 2011 Content and Scoring

A Tool for Transformation

<p>PCMH 1: Enhance Access and Continuity</p> <p>A. Access During Office Hours** B. Access After Hours C. Electronic Access D. Continuity (with provider) E. Medical Home Responsibilities F. Culturally/Linguistically Appropriate Services G. Practice Organization</p>	<p>Pts</p> <p>4 4 2 2 2 2 4</p> <p>20</p>	<p>PCMH 4: Provide Self-Care and Community Resources</p> <p>A. Support Self-Care Process** B. Provide Referrals to Community Resources</p>	<p>Pts</p> <p>6 3</p> <p>9</p>
<p>PCMH 2: Identify and Manage Patient Populations</p> <p>A. Patient Information B. Clinical Data C. Comprehensive Health Assessment D. Use Data for Population Management**</p>	<p>Pts</p> <p>3 4 4 5</p> <p>16</p>	<p>PCMH 5: Track and Coordinate Care</p> <p>A. Track Tests and Follow-Up B. Track Referrals and Follow-Up** C. Coordinate with Facilities/Care Transitions</p>	<p>Pts</p> <p>6 6 6</p> <p>18</p>
<p>PCMH 3: Plan and Manage Care</p> <p>A. Implement Evidence-Based Guidelines B. Identify High-Risk Patients C. Care Management** D. Medication Management E. Use Electronic Prescribing</p>	<p>Pts</p> <p>4 3 4 3 3</p> <p>17</p>	<p>PCMH 6: Measure and Improve Performance</p> <p>A. Measure Performance B. Measure Patient/Family Experience C. Implement Continuous Quality Improvement** D. Demonstrate Continuous Quality Improvement E. Report Performance F. Report Data Externally</p>	<p>Pts</p> <p>4 4 4 3 3 2</p> <p>20</p>
		<p>Optional Patient Experiences Survey</p>	
<p>** Must Pass Elements</p>			

Case Studies

- Integrated Physician Network—North Metro Denver, Colorado
 - Thanks to David Ehrenberger, MD
- Fairview—Minneapolis, Minneapolis
 - Thanks to Terry Carrol
- Camden Coalition of Healthcare Providers—Camden, New Jersey
 - Thanks to Jeff Brenner, MD, and Sandi Selzer

Independent Physician Network North Metro Denver, Colorado

Established in 2004

Serving communities in North Denver

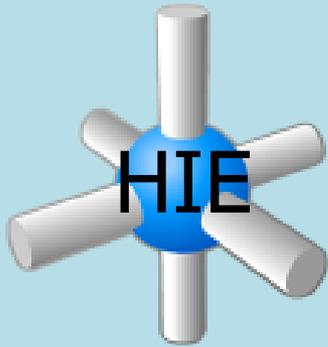
- Common leadership (501c3)
 - 26 practices (40 sites)
 - 200+ providers, 125+ primary care, 75+ specialists; 1,000+ end users
 - Family Medicine, Internal Medicine, Pediatrics, OB-GYN, Cardiology, Orthopedics, General Surgery, Neurosurgery, and Anesthesia
 - Federally Qualified Health Center (FQHC) (4 sites) and 2 community hospitals
 - 9 Patient-Centered Medical Home (PCMH) Level III practices
- Common enterprise EHR, database, analytics
- Common support and requirements for performance improvement
- Single signature contracting based on proven outcomes

iPN

The Lifeblood of an Accountable Care Community Clinical Integration *“Powered through Shared Infrastructure”*

- Collaborative Leadership for Community Benefit
 - Primary care physicians, sole community providers, hospitals, behavioral health, extended care facilities, FQHCs, patients
 - Common vision: effectiveness, access, efficiency, safety, etc.
- Healthcare Value Information Technology
 - Great at the care transaction
 - Great at actionable care analytics: meaningful data for population health management
- Learning Organization
 - Interested in data
 - Systems that promote evolutionary change
 - Transparent performance, results that show

iPN Community Health Record



Analytical Data Base and Warehouse/
Business Intelligence



ACO Quality Improvement Teams

Patient Registries

Data Mining + Reporting

- 1. Quality @ Population level
- 2. Per Capita Cost
- 3. Patient Experience

Primary Source, Formatted Data

Integrated Physician Network

Diabetes Outcomes

Practice(s): Broomfield Family Practice , Clinica Campesina , Coal Creek Family Medicine , Family Practice Associates , Flatiron Internal Medicine , Partners In Health Family Medicine
 Site(s): All

Rendering Location(s): All

Care Team(s): All

PCP(s): All

Rendering Provider(s): All

Total Diabetic Patients in Registry			
Total Number of Diabetes Patients	4119		
HbA1c - Blood Sugar Control			
Atleast One HbA1c (In last 365 days)	3514 / 4119	Percent	85.3 %
Two or more HbA1c (In last 365 days), > 90 days apart	2935 / 4119	Percent	71.3 %
Most recent HbA1c < 7% (In last 365 days)	1651 / 4119	Percent	40.1 %
Poor control - HbA1c > 9% or No HbA1c (In last 365 days)	1253 / 4119	Percent	30.4 %
Blood Pressure Control			
SBP and DBP documented	3843 / 4119	Percent	93.3 %
Most recent BP < 130/80	1556 / 4119	Percent	37.8 %
Most recent BP < 140/90	2961 / 4119	Percent	71.9 %
Cholesterol Control			
Atleast One LDL (In the last 365 days)	2823 / 4119	Percent	68.5 %
Most recent LDL < 100 mg/dl (In last 365 days)	1751 / 4119	Percent	42.5 %
Poor control LDL - LDL >130 mg/dl or No LDL (In last 365 days)	1668 / 4119	Percent	40.5 %
Self Management / Education			
Self Management Goal Set (Last 365 days)	1547 / 4119	Percent	37.6 %
Eye Exam			
Eligible for Retinal Exam	4119 / 4119	Percent	100 %
Retinal Exam Done (In the last 365 days)	991 / 4119	Percent	24.1 %
Foot Exam			
Eligible for Foot Exam	4103 / 4119	Percent	99.6 %
Foot Exam Done (In the last 365 days)	2055 / 4103	Percent	50.1 %
Nephropathy - Renal Screening			
Microalbumin OR MAC Ratio result (In last 365 days)	2136 / 4119	Percent	51.9 %
Creatinine Serum result (In the last 365 days)	3231 / 4119	Percent	78.4 %
Any Intervention for Nephropathy (last 365 days)	3698 / 4119	Percent	89.8 %
No Medical Attention to Nephropathy (last 365 days)	733 / 4119	Percent	17.8 %
Tobacco Use & Counselling			
Current Smoker	590 / 4119	Percent	14.3 %
Smoking Counseling (last 365 days)	269 / 590	Percent	45.6 %

iPN: 4119 people
w/Diabetes

Run Date: July 14, 2011 11:46:49

Total: 577 people
w/Diabetes

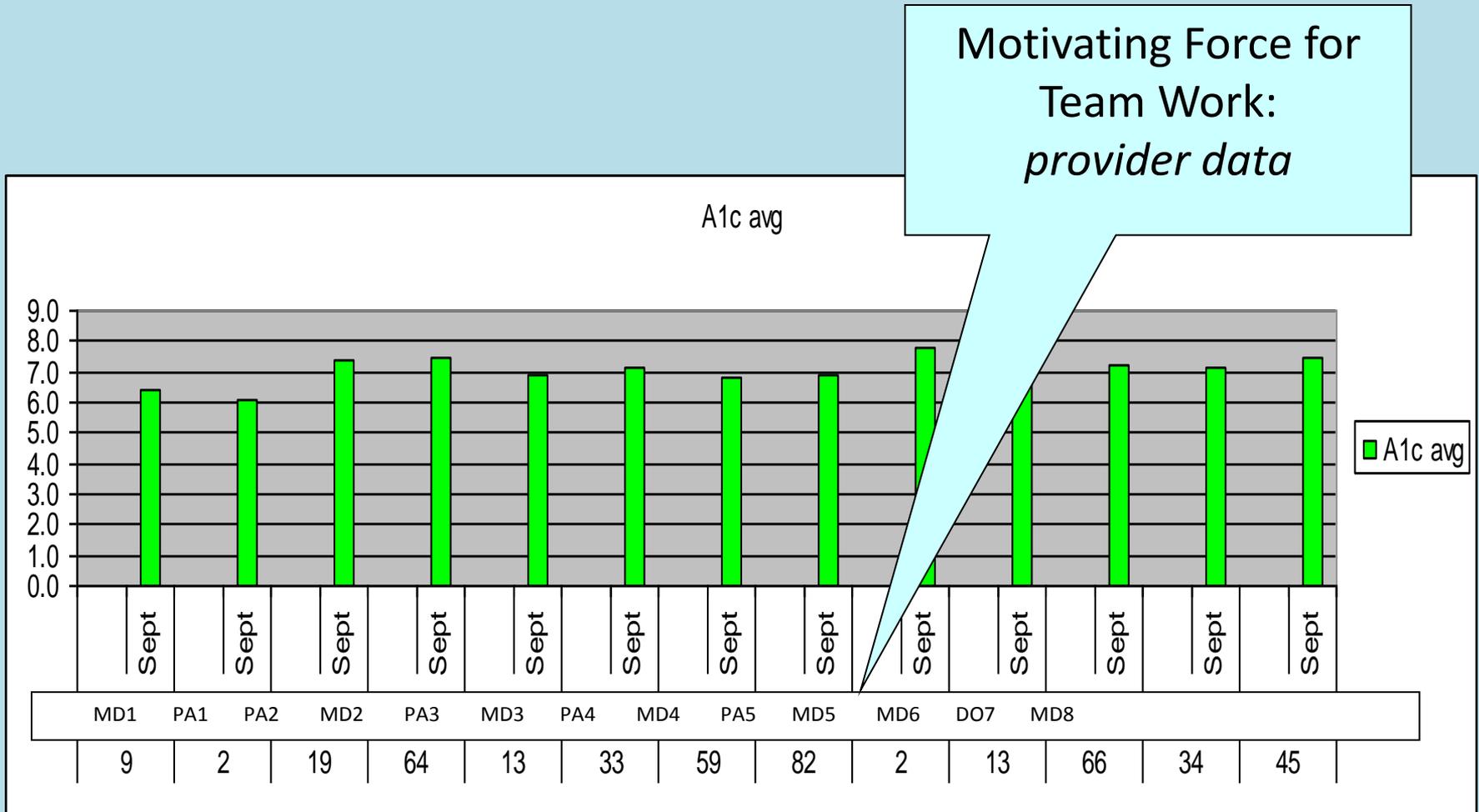
577			
577	Percent	84.9 %	
577	Percent	77.3 %	
577	Percent	49.2 %	
577	Percent	23.2 %	
577	Percent	95.1 %	
577	Percent	47.7 %	
577	Percent	82.8 %	
577	Percent	79.5 %	
577	Percent	57 %	
577	Percent	27.2 %	
577	Percent	41.1 %	
577	Percent	100 %	
577	Percent	37.6 %	
577	Percent	99.8 %	
576	Percent	54.7 %	
577	Percent	66 %	
577	Percent	83.5 %	
577	Percent	91.7 %	
577	Percent	13.2 %	
577	Percent	10.4 %	
160	Percent	11.7 %	

Date: July 14, 2011 11:58:37

Total: 65 people
w/Diabetes

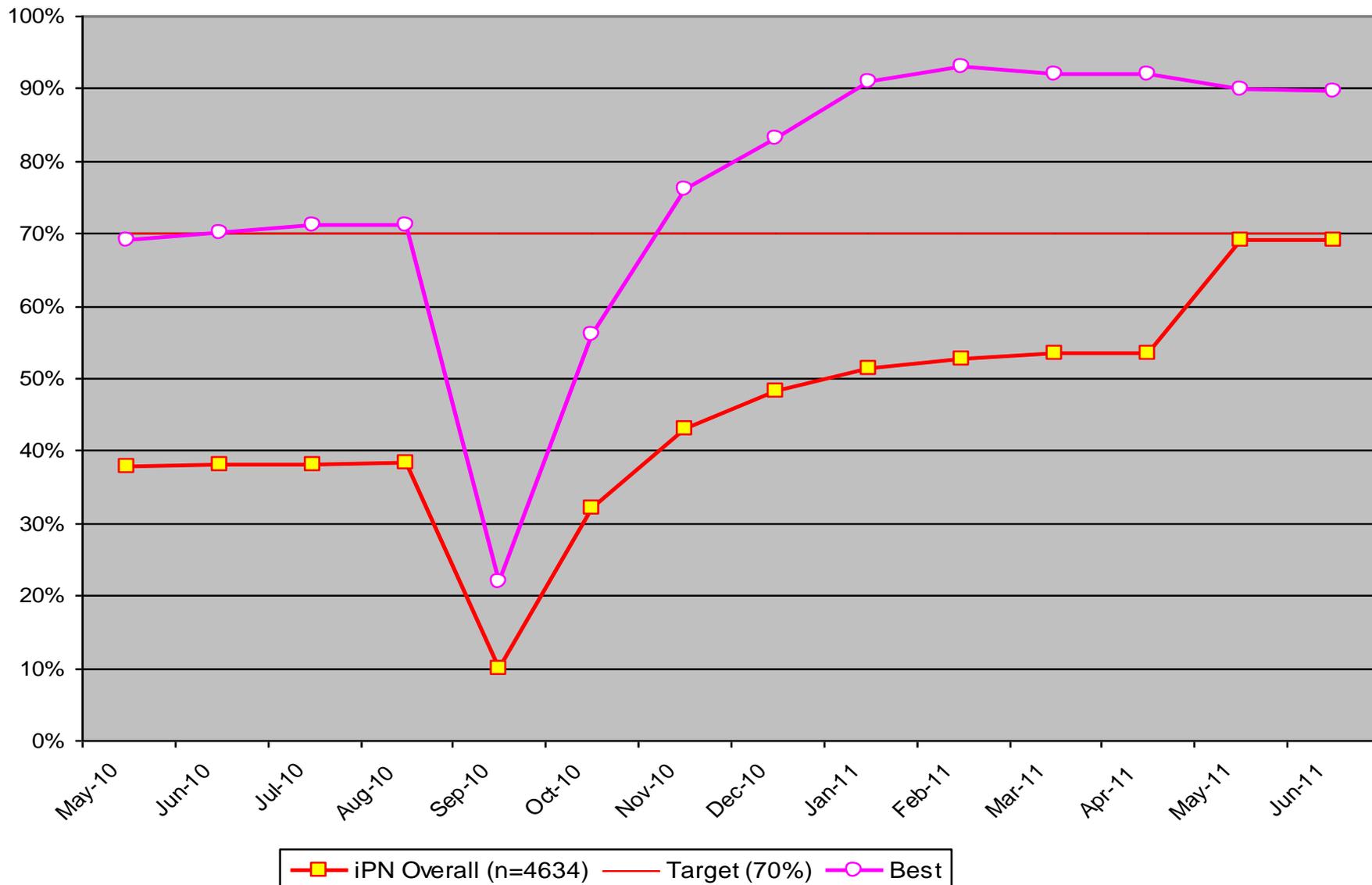
	Percent	89.2 %	
	Percent	81.5 %	
	Percent	43.1 %	
	Percent	20 %	
	Percent	96.9 %	
	Percent	52.3 %	
	Percent	89.2 %	
	Percent	89.2 %	
	Percent	72.3 %	
	Percent	10.8 %	
	Percent	32.3 %	
	Percent	100 %	
	Percent	41.5 %	
	Percent	100 %	
	Percent	52.3 %	
	Percent	69.2 %	
	Percent	87.7 %	
	Percent	93.8 %	
	Percent	10.8 %	
	Percent	0 %	

The Practice Data Wall



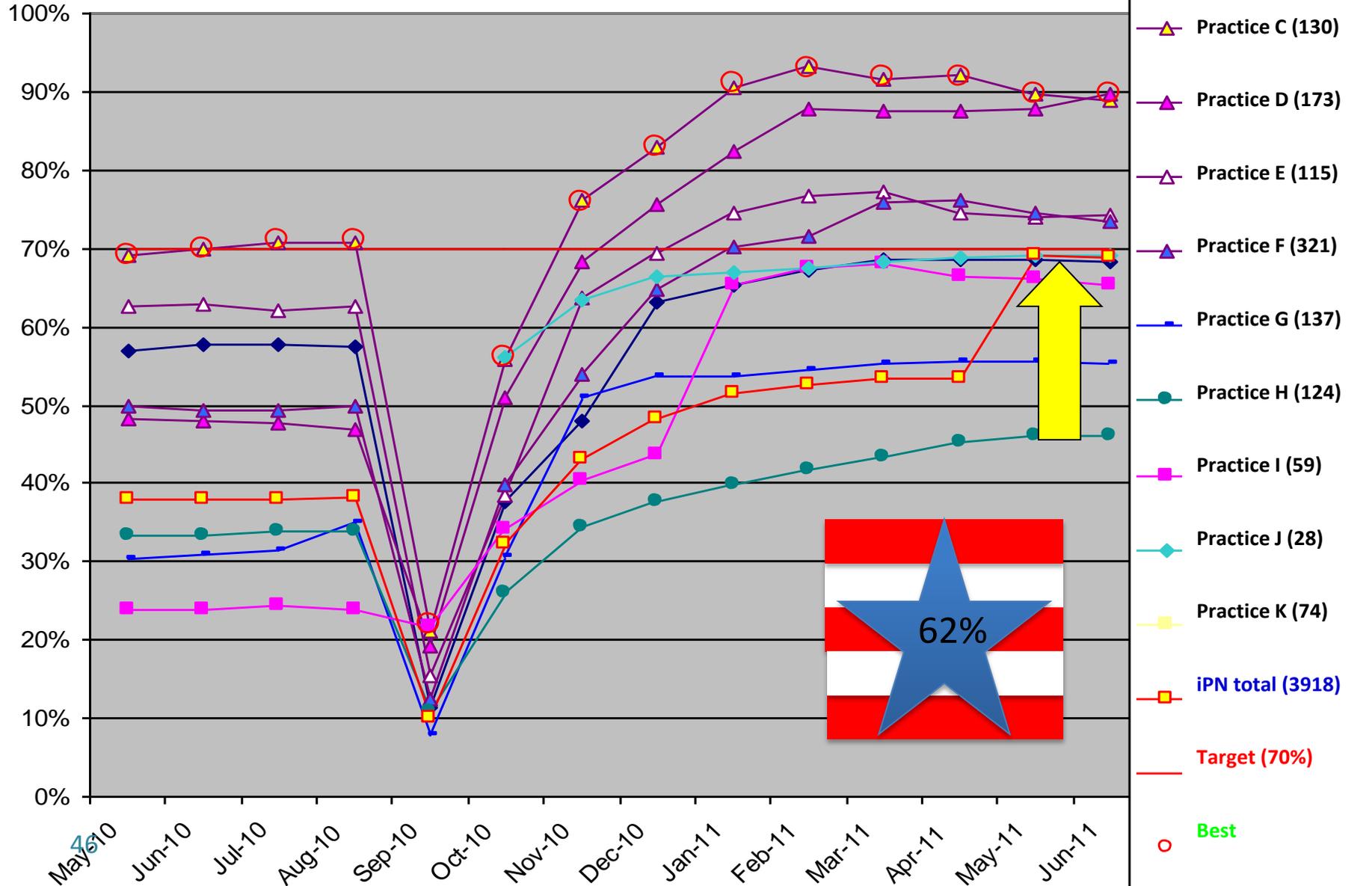
Flu vaccination

integrated Physician Network Flu Vaccination



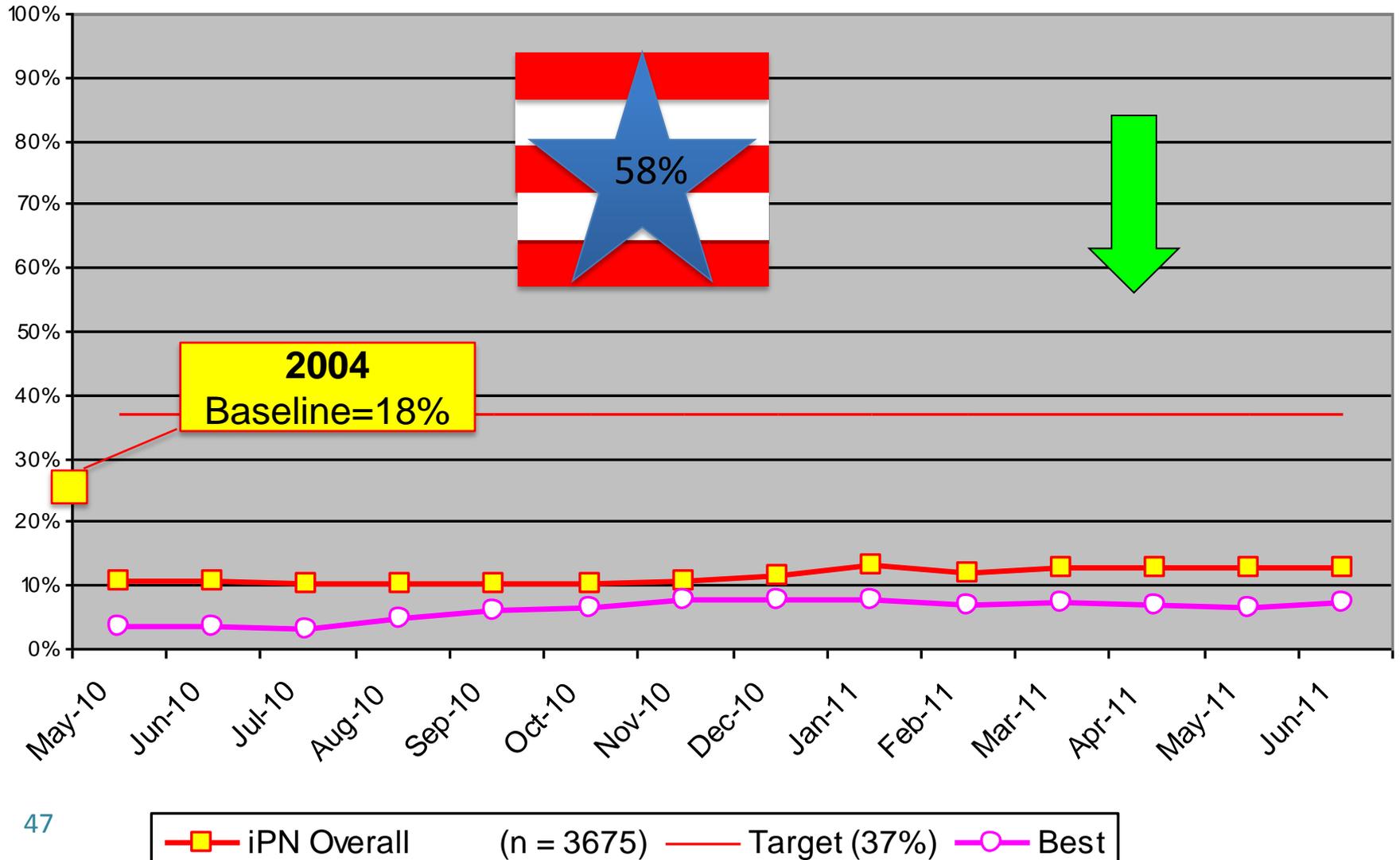
Flu vaccination: practice data

integrated Physician Network Flu Vaccination



Diabetes cholesterol control

integrated Physician Network
Diabetes Patients with LDL \geq 130mg/dl (poor cont)
N = 2921 (Patients with an LDL in the last year)



Accountable Care for Independent Providers: *A Turnkey Organization*

iPN Community Integration Model

1. Administration: CEO (1.0), CMO (0.5), Administrative Assistant (1.0)
2. EHR and Practice Management System Trainers (3.0)
3. Quality and Performance: Quality Director (1.0), Practice Coaches (2.0)
4. Clinical Information System Support (Local): IS Director (0.5), EHR Analyst (1.0), PMS Analyst (1.0), Help Desk (0.5), Analytics and Reporting (1.0)
5. Community Hospital: HIE integration; CEO Board member (non-voting); Safe Harbor subsidy @ 25%

iPN Community Integration Model – Take-Home Messages

1. Requires collaborative multi-stakeholder vision, clinical leadership around HIT design and function, and high-functioning teamwork across the community
2. Essential for robust clinical integration and driving Triple Aim value
3. Inexpensive (~2% revenues across the membership)
4. A proven model that delivers on the infrastructure, systems, and change typically absent from community resources
5. www.ipn.org

Fairview

Large integrated health system

- Not-for-profit, established in 1906
- Headquartered in Minneapolis, MN
- Partnership with University of Minnesota
- 22,000+ employees
- 2,500 aligned physicians

Comprehensive continuum of services

- 8 hospitals (1,450 staffed beds)
- 42 primary care clinics
- 55+ specialty clinics
- 28 retail pharmacies
- 29 rehabilitation centers
- 26 senior housing locations
- Home care and hospice



2009 data

- 4.8 million outpatient encounters
- 80,314 inpatient admissions
- \$333.6 million community contributions
- Total assets of \$2.4 billion
- \$2.7 billion total revenue

Fairview

Fairview's Strategic Roadmap

Mission

To improve the health of the communities we serve.

Vision

The best health care delivery system for America, in partnership with University of Minnesota.

Goals

Exceptional Clinical Care

Exceptional Experience

Effective & Efficient Use of Resources

Strategic Growth

Nation Leading Research & Education

Strategies

Create an integrated, multi-specialty provider network.

Create an environment for transformation that actively engages employees and physicians.

Eliminate unintentional variation and transform overall performance – quality, experience, cost – across the continuum.

Create new models for innovative care delivery and payment.

Establish the capabilities to accept risk and manage the health of populations.

Attract new customers and optimize relationships with current customers.

Invest in research and education to create a reliable pipeline of innovation and quality talent.

Create financial capacity to fund quality, innovation and growth.

Fairview

Building Capabilities to Care for the Health of Populations

Volume

Value

Fee-for-Service

Shared Savings

Episode Payment

Partial Capitation

Global Payment

2009

2010

2011

2012

Care Delivery Innovation

Medical Home

Network Development

Epic Install

Population Health

Integrated Business Intelligence

Fairview Medical Group Reorganization

Clinical Pathways

Physician Compensation

Payer Contracting Methodologies

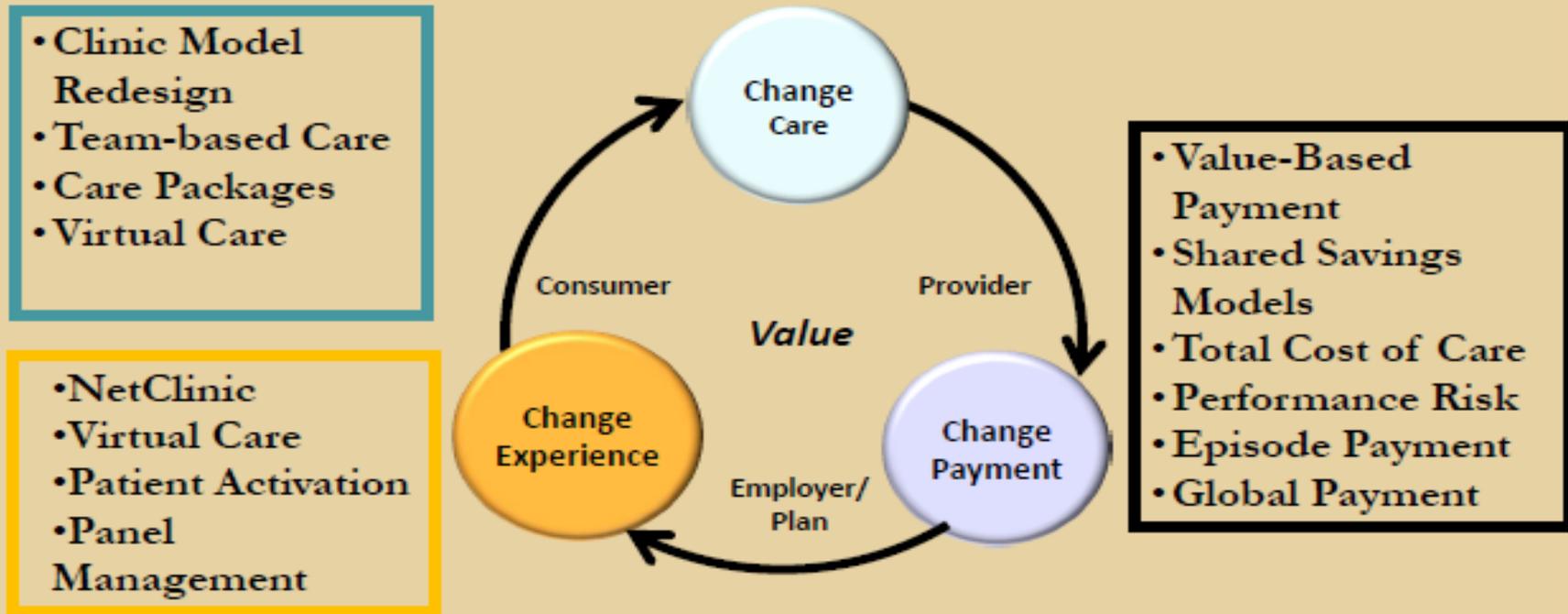
Fairview Population

Operating Model/Infrastructure

8

Fairview

Work Underway to Create “New Value Chain”

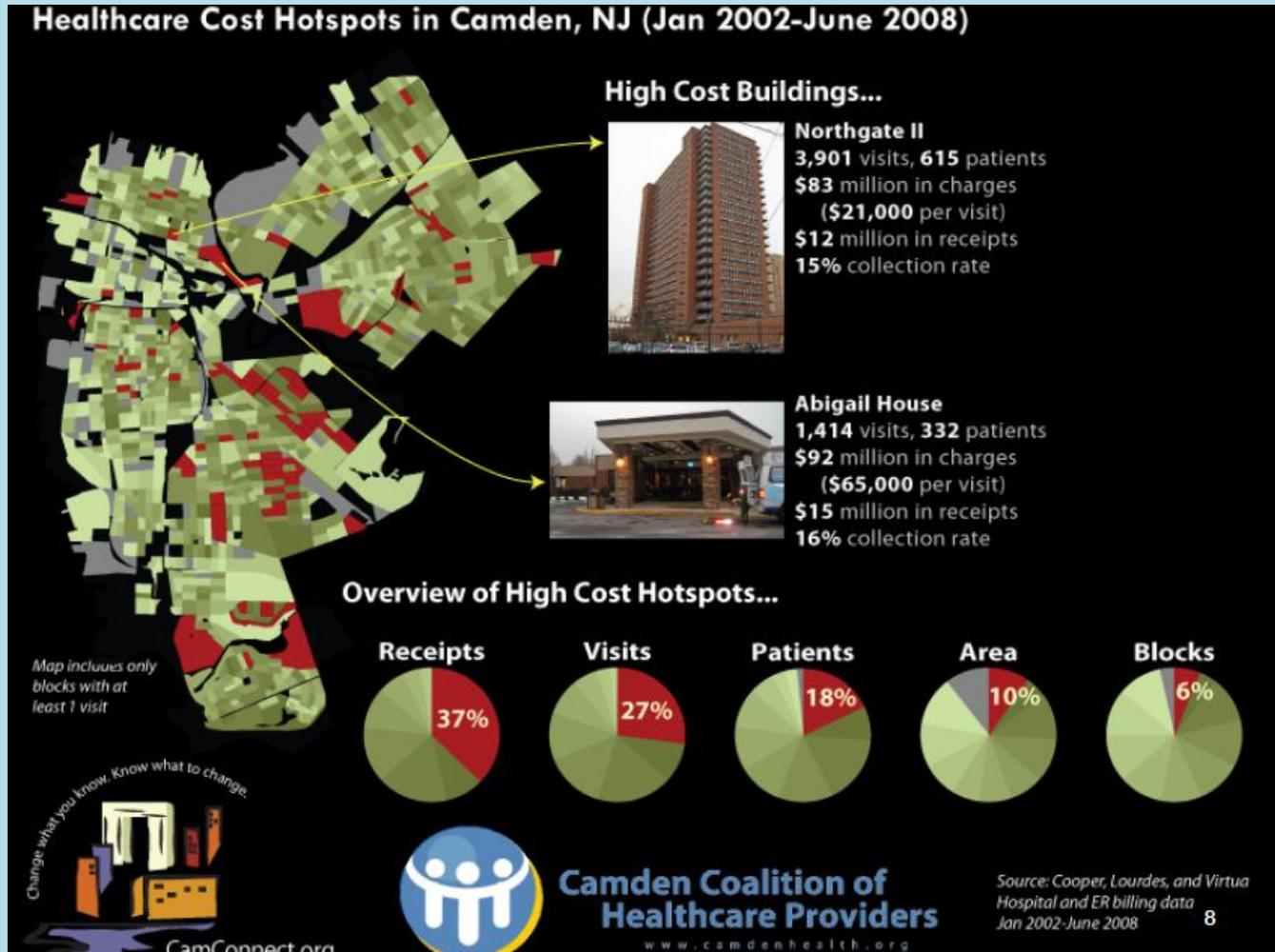


Building a Community Capability to Generate New Care, Experience and Payment Models

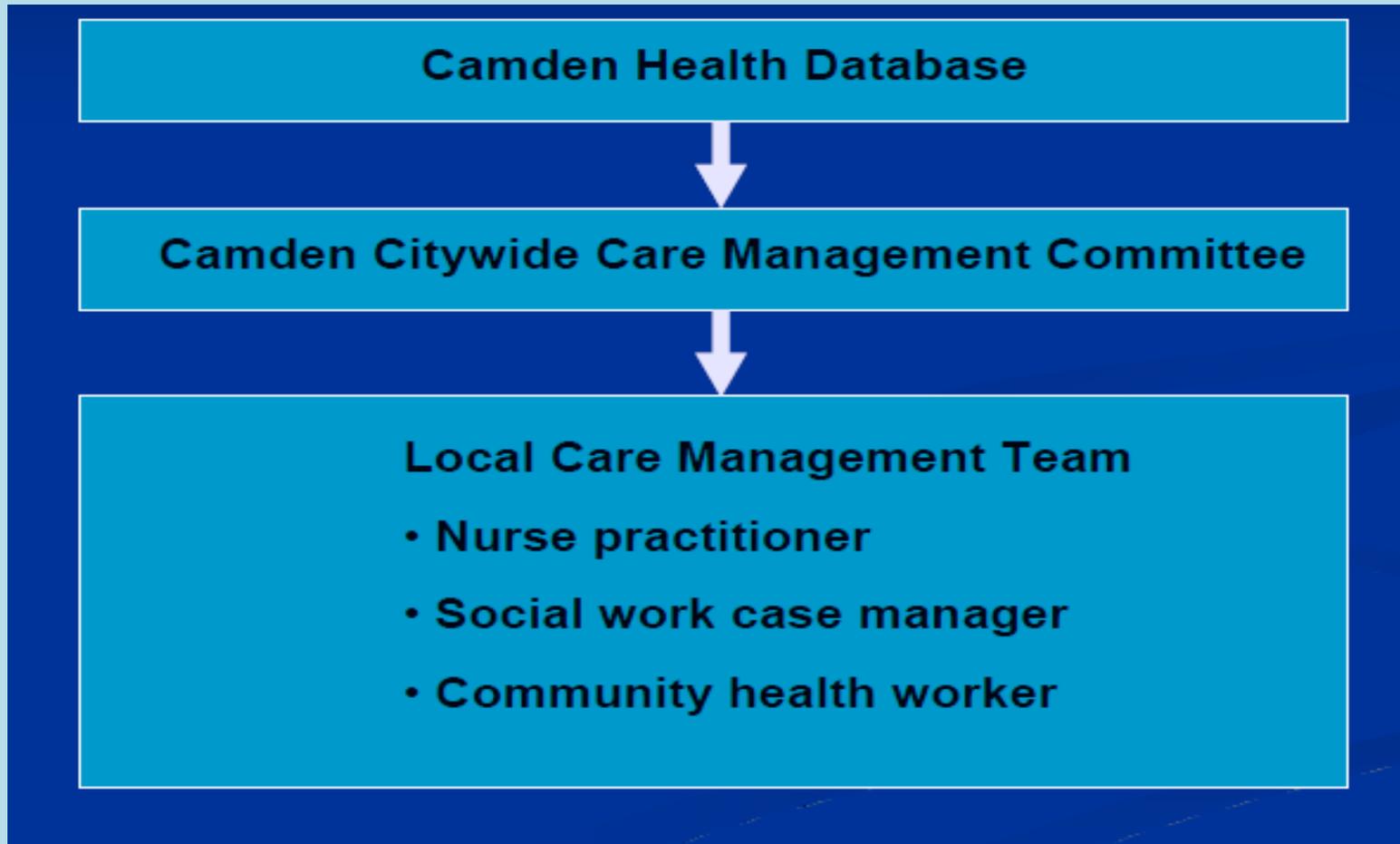
Camden Coalition of Healthcare Providers

- 2002–2009 with Lourdes, Cooper, Virtua data
 - 480,000 records with 98,000 patients
 - 50% population use ER/hospital in 1 year
- Leading emergency department/hospital utilizers citywide
 - 324 visits in 5 years
 - 113 visits in 1 year
- Total revenue to hospitals for Camden residents \$460 million + charity care
 - Most expensive patient – \$3.5 million
 - 30% costs = 1% patients
 - 80% costs = 13% patients
 - 90% costs = 20% patients

Hotspotters



Citywide Care Management System



Camden Diabetes Collaborative

1. Transform primary care at 10 local offices (Patient-Centered Medical Home using Chronic Care Model)
2. Improve access to diabetic education
3. Care coordination with Medical Day Programs
4. Targeted care of the high-cost/high-needs diabetes mellitus patients

Camden
HIE
Live
Monday
Oct 11,
2010

https://private.chartconnect.com/emr/

NetPracticeEHRweb

NetPractice EHRweb
Version 7.0.0

Jeff Brenner, M.D.
Camden Coalition of Healthcare Providers

Patient Search

Last
First
Search By Name

M PID MRN

M PID
Search By Number

Recent Patients
Scheduled Patients
No New Messages
View Encounters
Log Out



Chart Summary | **History** | **Meds/Allergies** | **Notes** | **Labs** | **Procedures** | **Radiology** | **Tools** | **Admin/Pref** | **Orders**

Patient, TestJeff **DOB: 02/15/1957** **MR #: 2** **Home: 800-999-6666**
Provider: Jennifer Jarecki, DO **Pharmacy: ?**

Select Clinic For Chart View | Cooper Emergency Department

CBC * **05/19/2010**

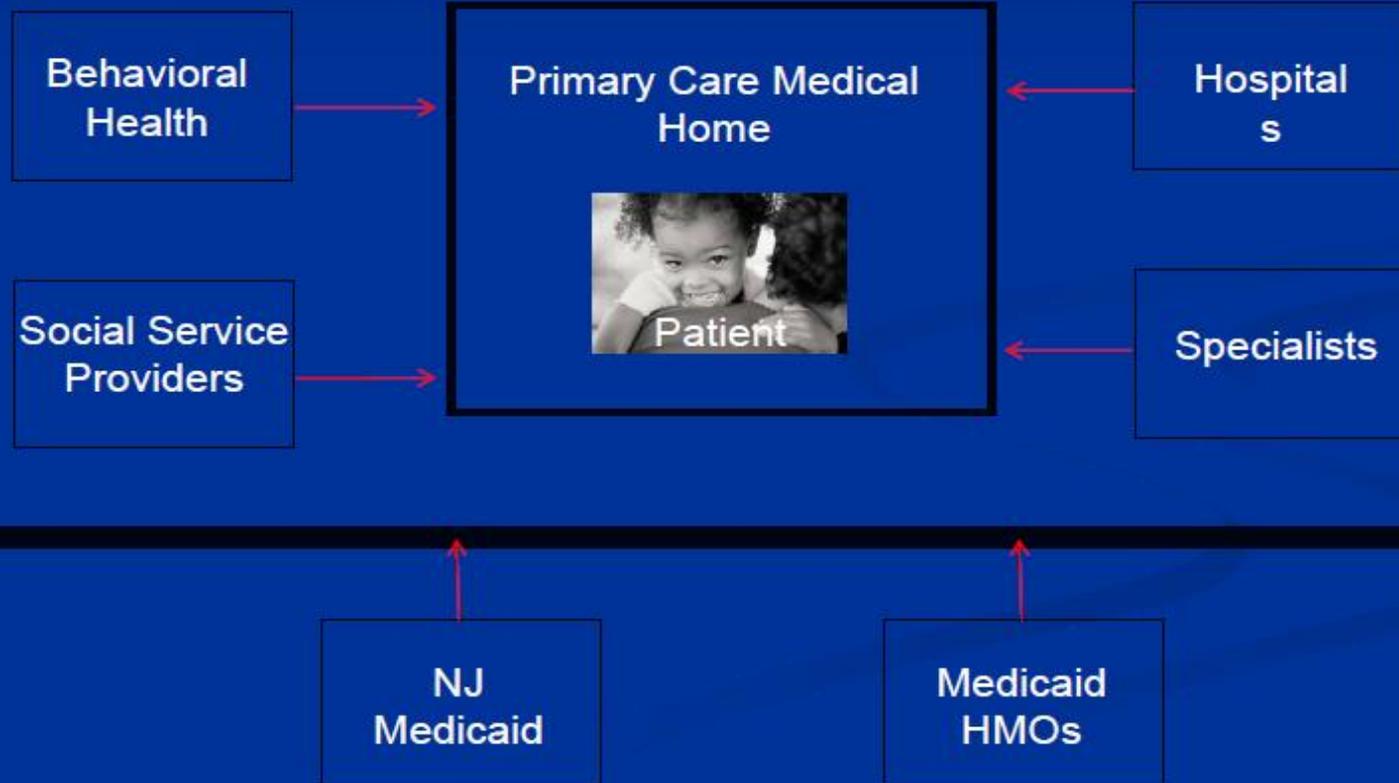
PATIENT NAME: Patient, TestJeff **COLLECTION DATE:** UNKNOWN
BIRTH DATE: 02/15/1957 **SPECIMEN SOURCE:**
HOME PHONE: 800-999-6666 **DELIVERED TO:** Ryan Arnold, MD
ACCESSION #: **STATUS:** Final

TEST NAME	RESULTS	UNITS	REFERENCE RANGE
WBC*	5	KaUL	4 - 11 KaUL
RBC*	4	MaUL	3.8 - 5.2 MaUL
Hemoglobin*	15	g/dL	14 - 18 g/dL
Hematocrit*	55 H	%	42 - 52 %
MCV*	81	fL	80 - 100 fL
MCH*	26 L	pg	27 - 34 pg
MCHC*	30 L	%	30.5 - 37.5 %
RDW*	12	%	11 - 15 %
Platelet Count*	150	KaUL	140 - 450 KaUL
MPV*	14	fL	7 - 14 fL
Lymphocytes*	33	%	21 - 49 %
Absolute Monocytes*	5	%	3 - 11 %
Eosinophils*	6	%	0 - 7 %
Absolute Neutrophils*	2	KaUL	1.8 - 7.7 KaUL
Absolute Lymphocytes*	2	KaUL	1 - 5 KaUL
Absolute Monocytes*	1 H	KaUL	0 - 0.8 KaUL
Absolute Eosinophils*	.2	KaUL	0 - 0.5 KaUL
Absolute Basophils*	.2	KaUL	0 - 0.2 KaUL

Testing Facility Comment:
Cooper Emergency Department in-house lab results entered by NetPractice Admin on 05/19/2010 at 6:41 AM.

16

Community-based Accountable Care Organization



Camden Cost-Saving Strategies

- Nurse practitioner-led clinics in high-cost buildings
- More high-utilizer outreach teams
- Medical home-based nurse care coordination
- More same-day appointments (open access scheduling)



Module 3A: Connecting Providers and Managing High-Risk Patients

**Julie Schilz, Director, Community Collaborative
Colorado Beacon Consortium
Rocky Mountain Health Plans**
julie.schilz@coloradobeaconconsortium.org

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ACO Accelerated Development Learning Session

San Francisco, CA
September 15-16, 2011

Module 3A: Connecting Providers and Managing High-Risk Patients



September 16, 2011
8:15–10:15 a.m.

Marc Lassaux, Technical Director
Colorado Beacon Consortium

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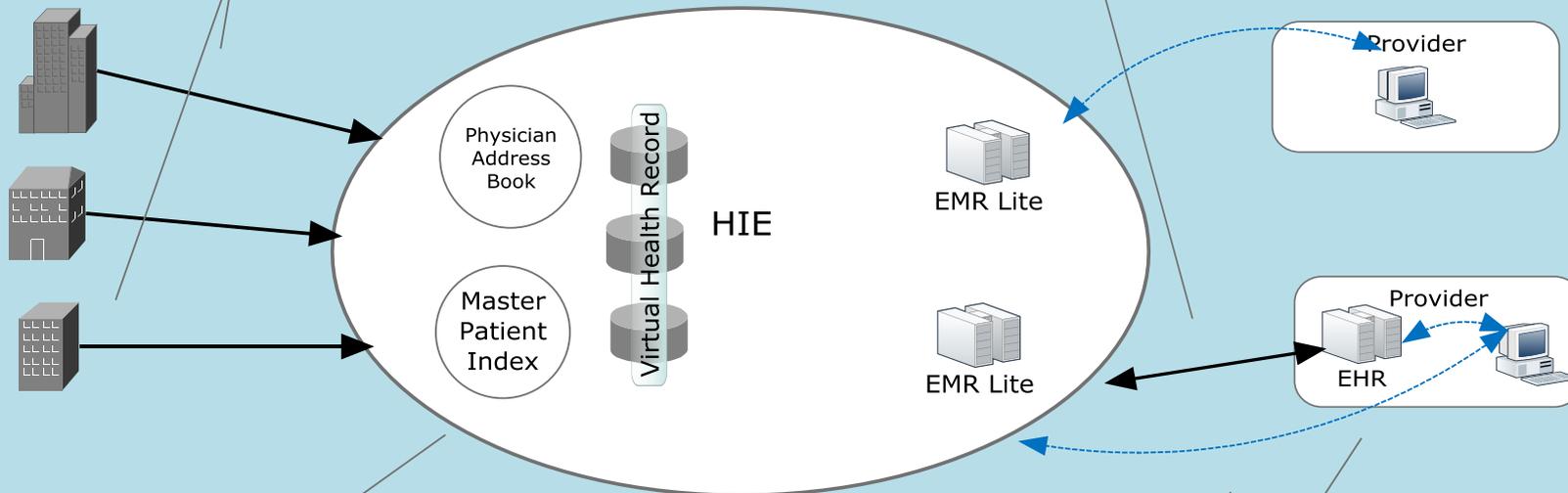
Topics to Discuss

- An example of basic HIE operation
- Interfacing and Interoperability
- Data Aggregation and Access
- Applications at the HIE Level
- Ease of Access and Communication
- Inter-HIE Connectivity
- A Smaller-Scale Example
- Questions and Discussion

HIE Basics—QHN as an Example

> Major sources: Hospitals, Labs, etc. send clinical data Labs, Rad, Trn, Path, ADT

> Data from major sources is sent to providers
 --EHR/ EMR Lite/Registry
 > Data from provider systems sent to HIE
 --Provider to Provider Exchange
 --Data Aggregation



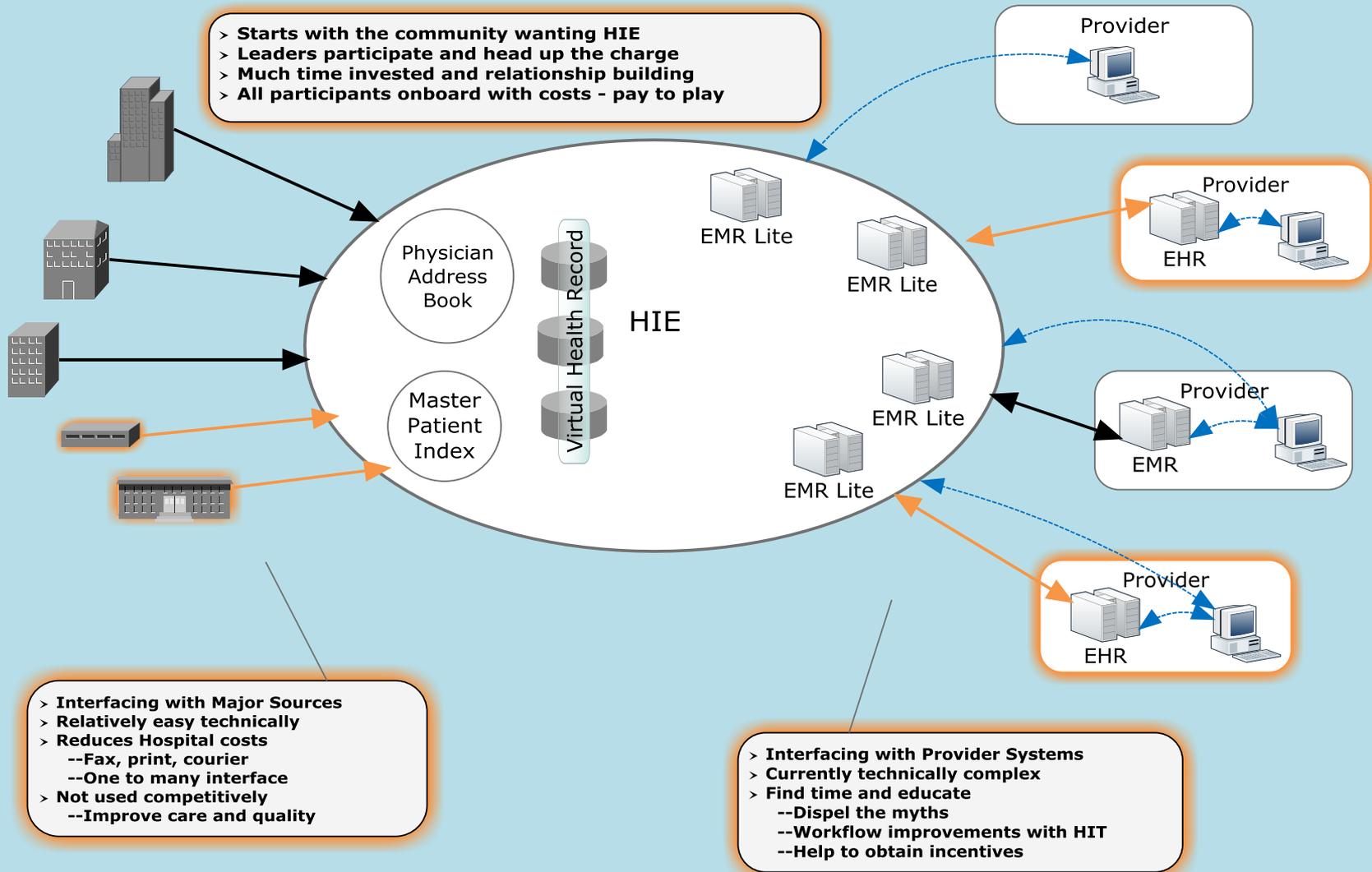
HIE and Value Add

- > Improving Care Transitions
- > Improving Access to Data
- > Virtual Health Record
- > Electronic Referrals
- > e-Ordering
- > e-Prescribing
- > Registry
- > EMR capabilities
- > EHR Interfaces/HIT Interoperability
- > Workflow redesign

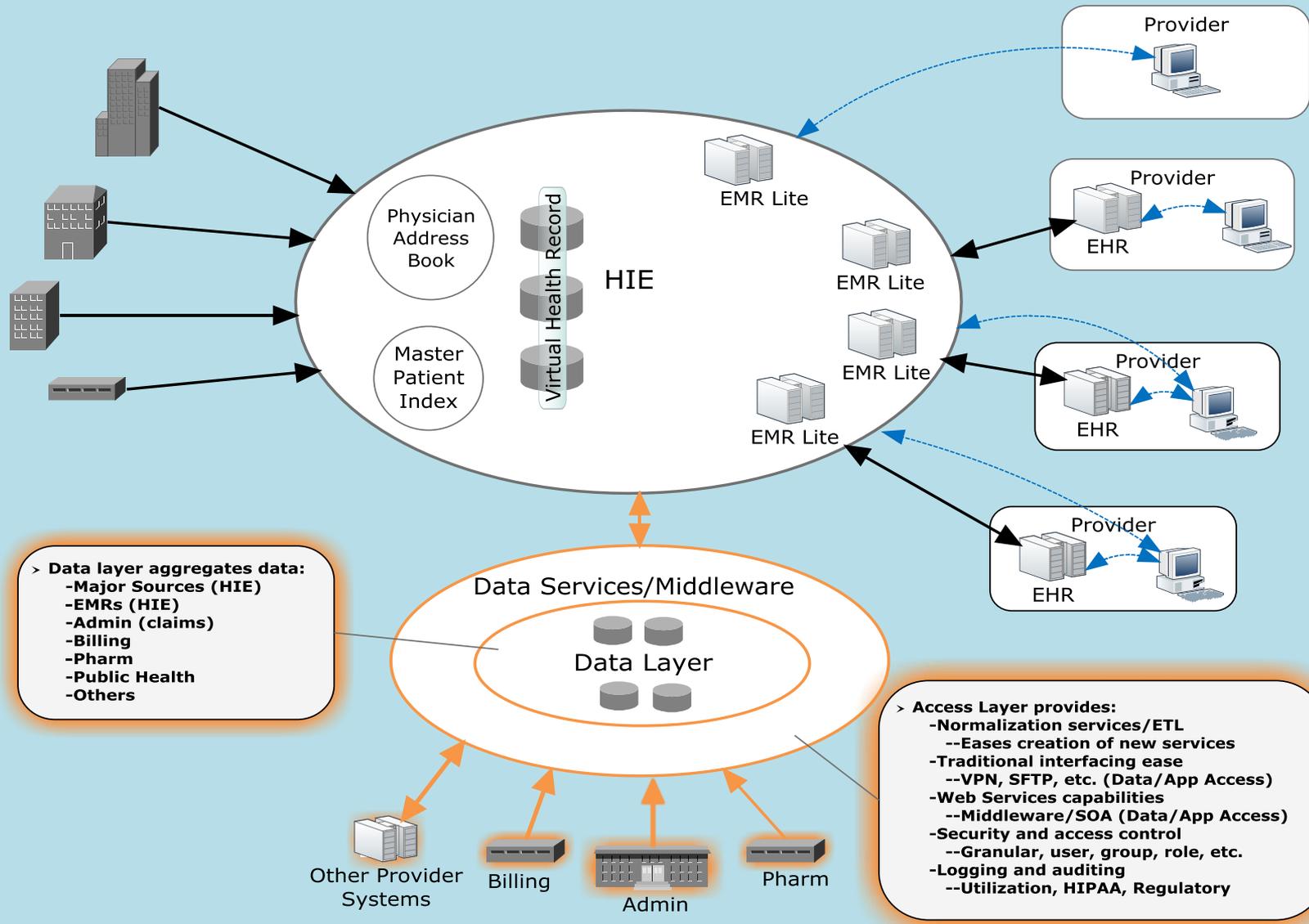
> Providers access the HIE and EMR Lite for workflow, clinical messages, results, VHR, referrals, eRx, lab orders, etc.
 > Other Providers utilize an EHR/HIE combination or standalone EHR



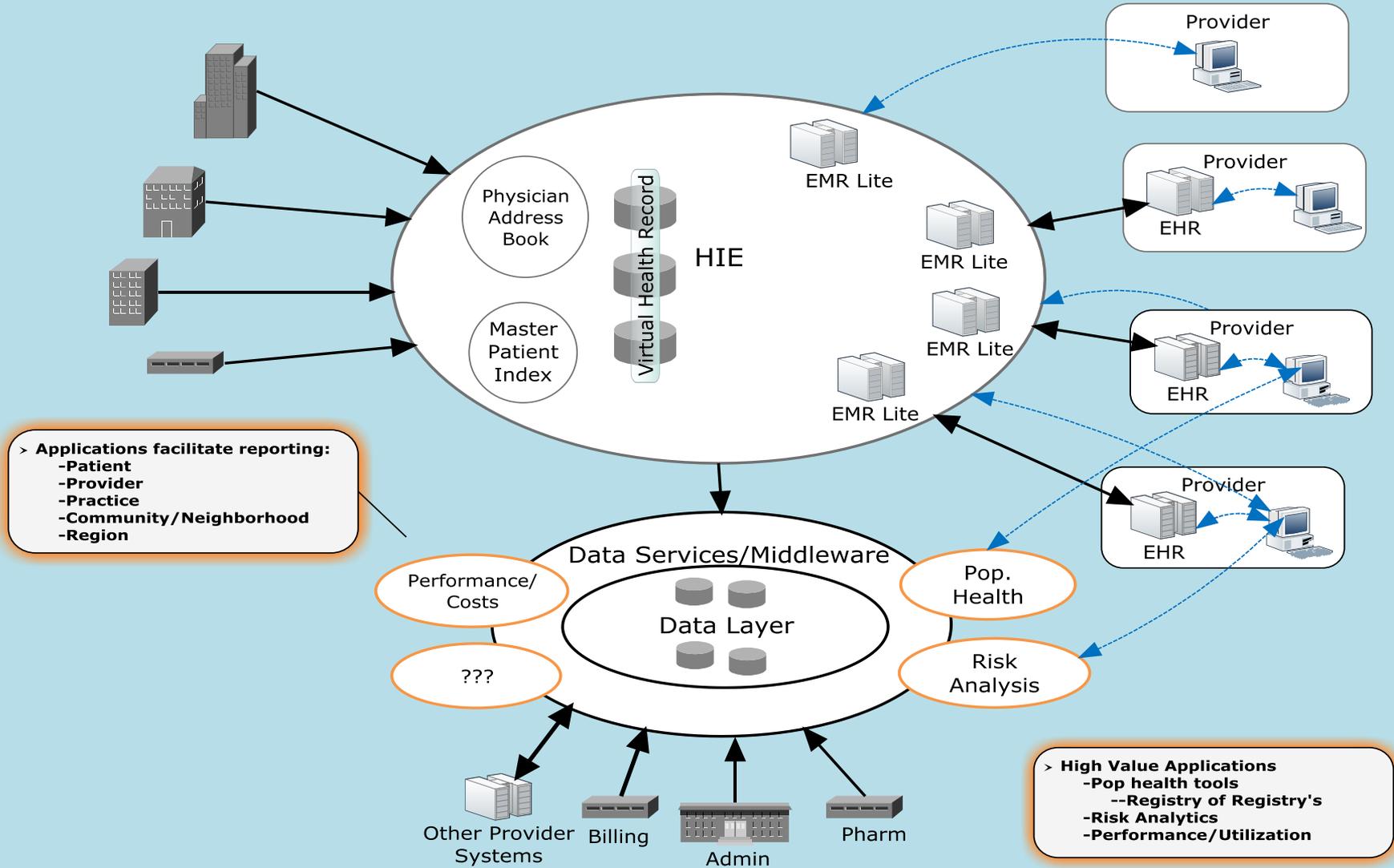
Interfacing with Major Sources and EHRs



Data Aggregation and Access



Reporting and Applications

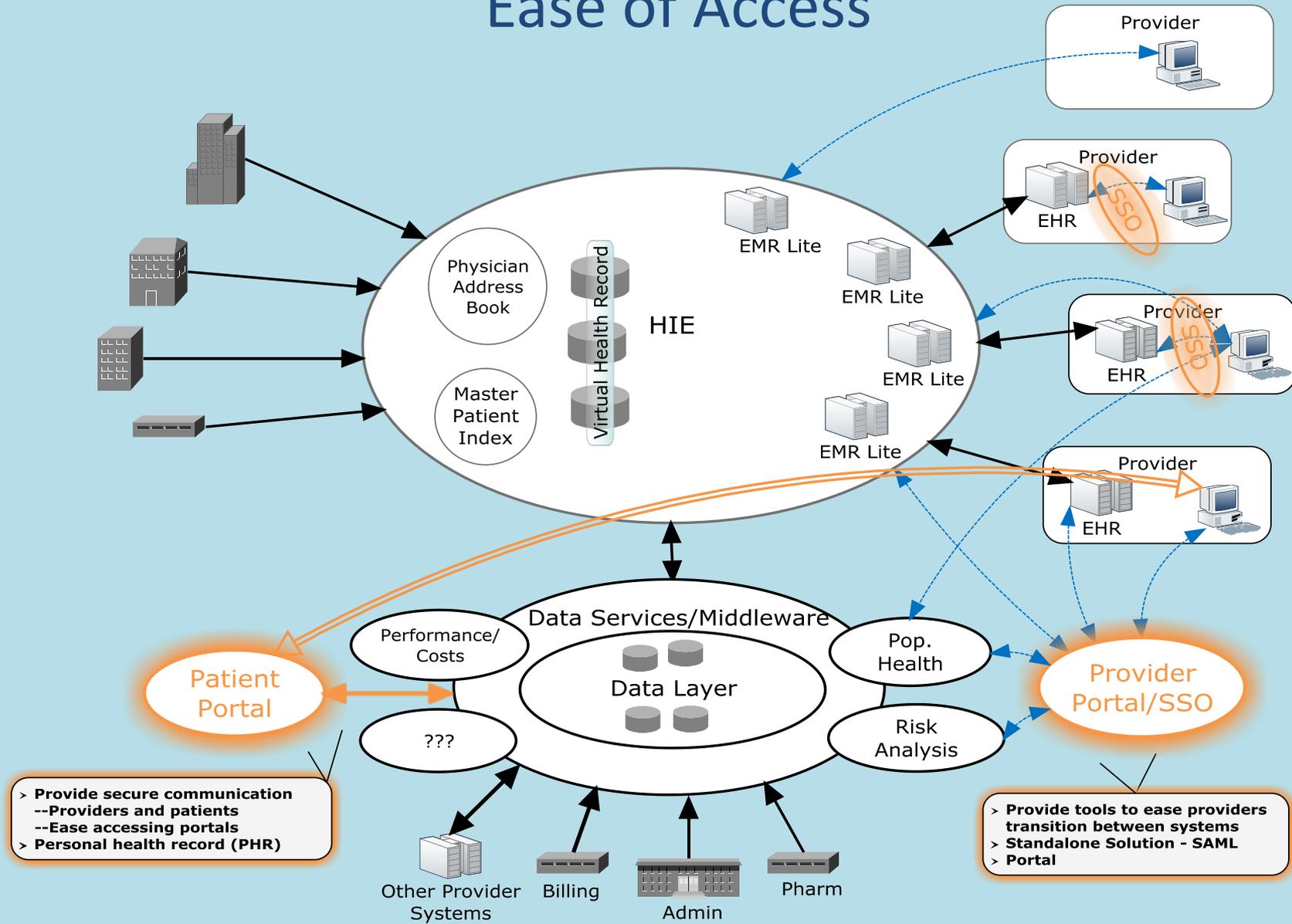


> **Applications facilitate reporting:**
 -Patient
 -Provider
 -Practice
 -Community/Neighborhood
 -Region

> **High Value Applications**
 -Pop health tools
 --Registry of Registry's
 -Risk Analytics
 -Performance/Utilization



Ease of Access



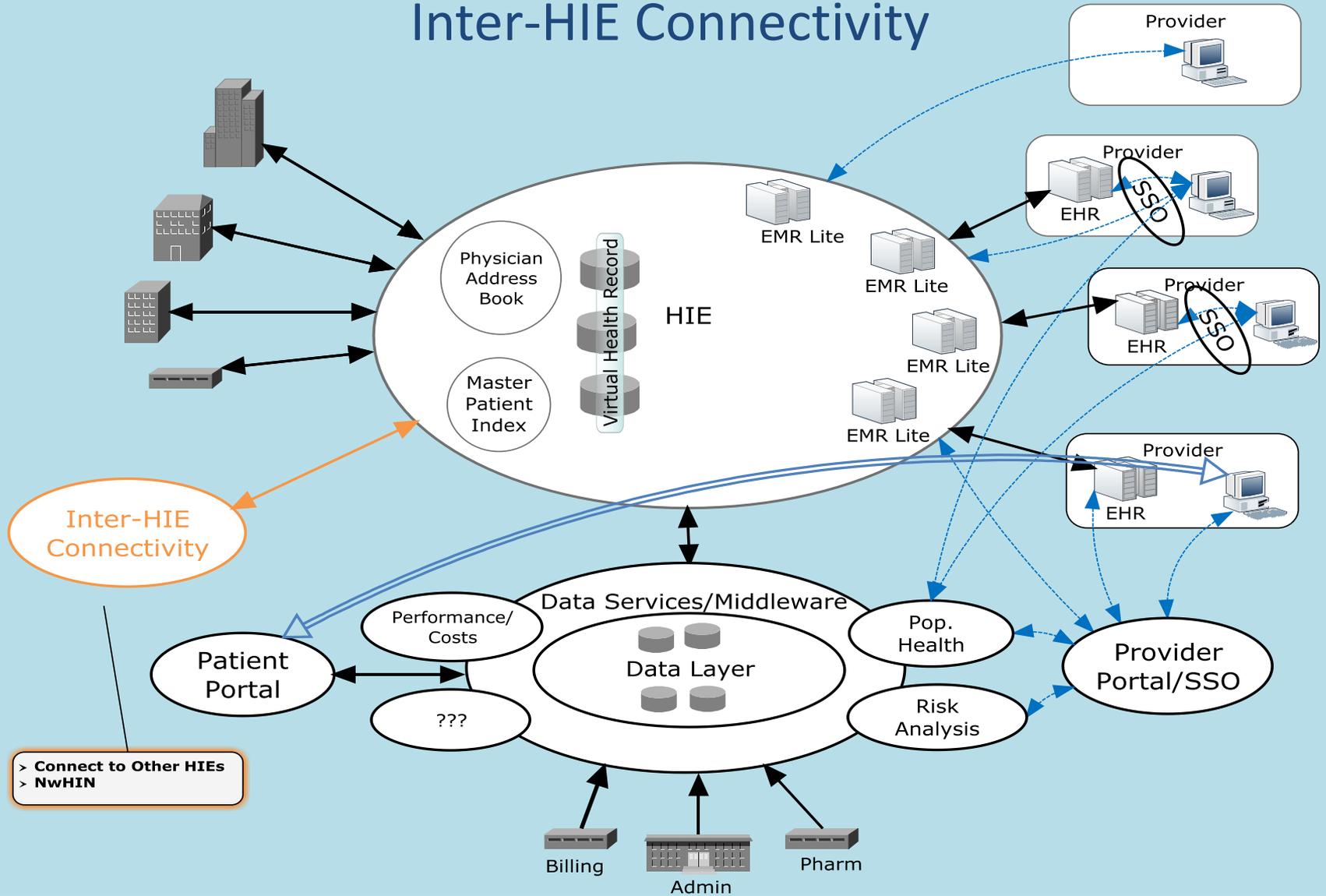
- > Provide secure communication
- Providers and patients
- Ease accessing portals
- > Personal health record (PHR)

- > Provide tools to ease providers transition between systems
- > Standalone Solution - SAML
- > Portal

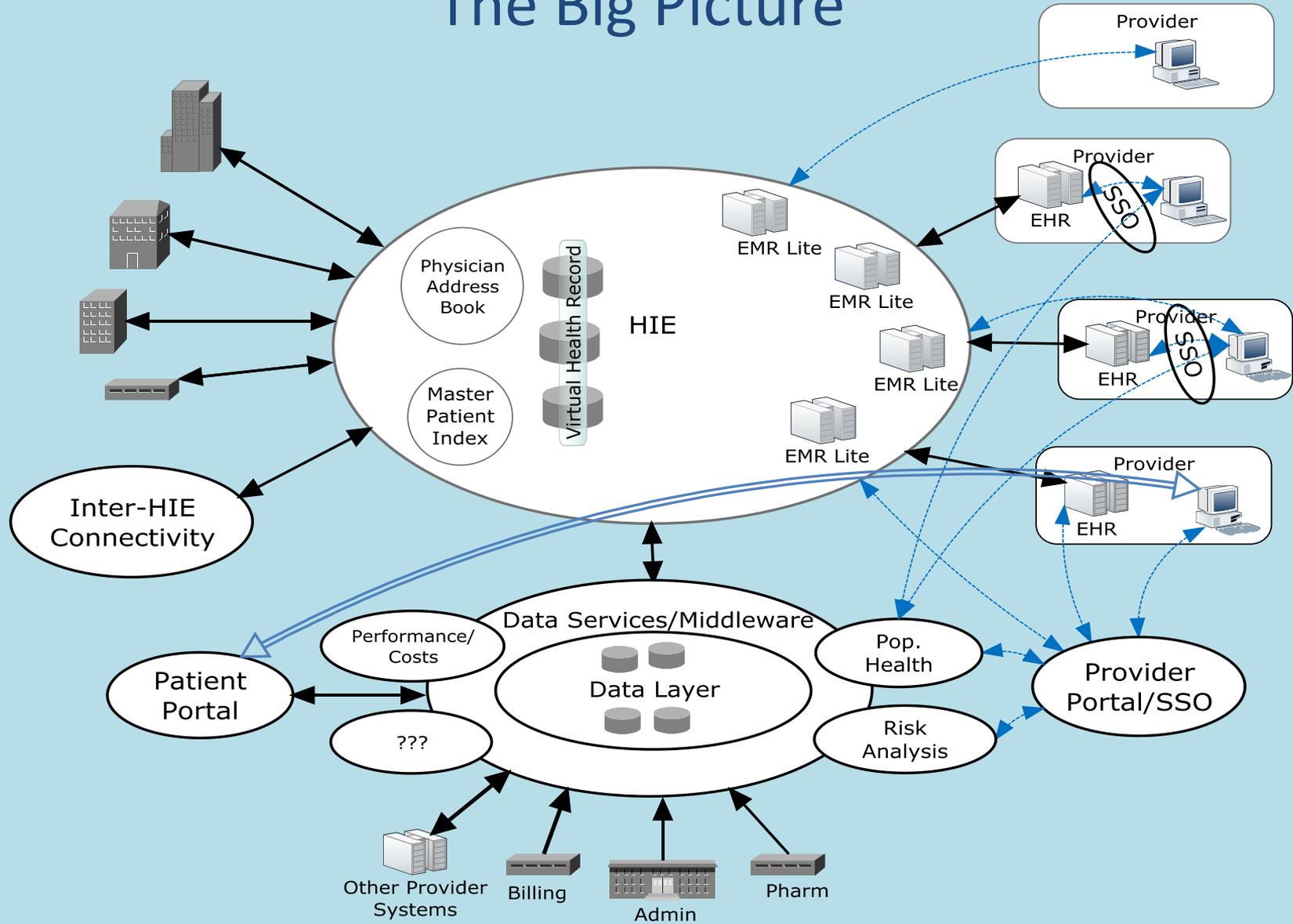


QHN + Beacon Objectives

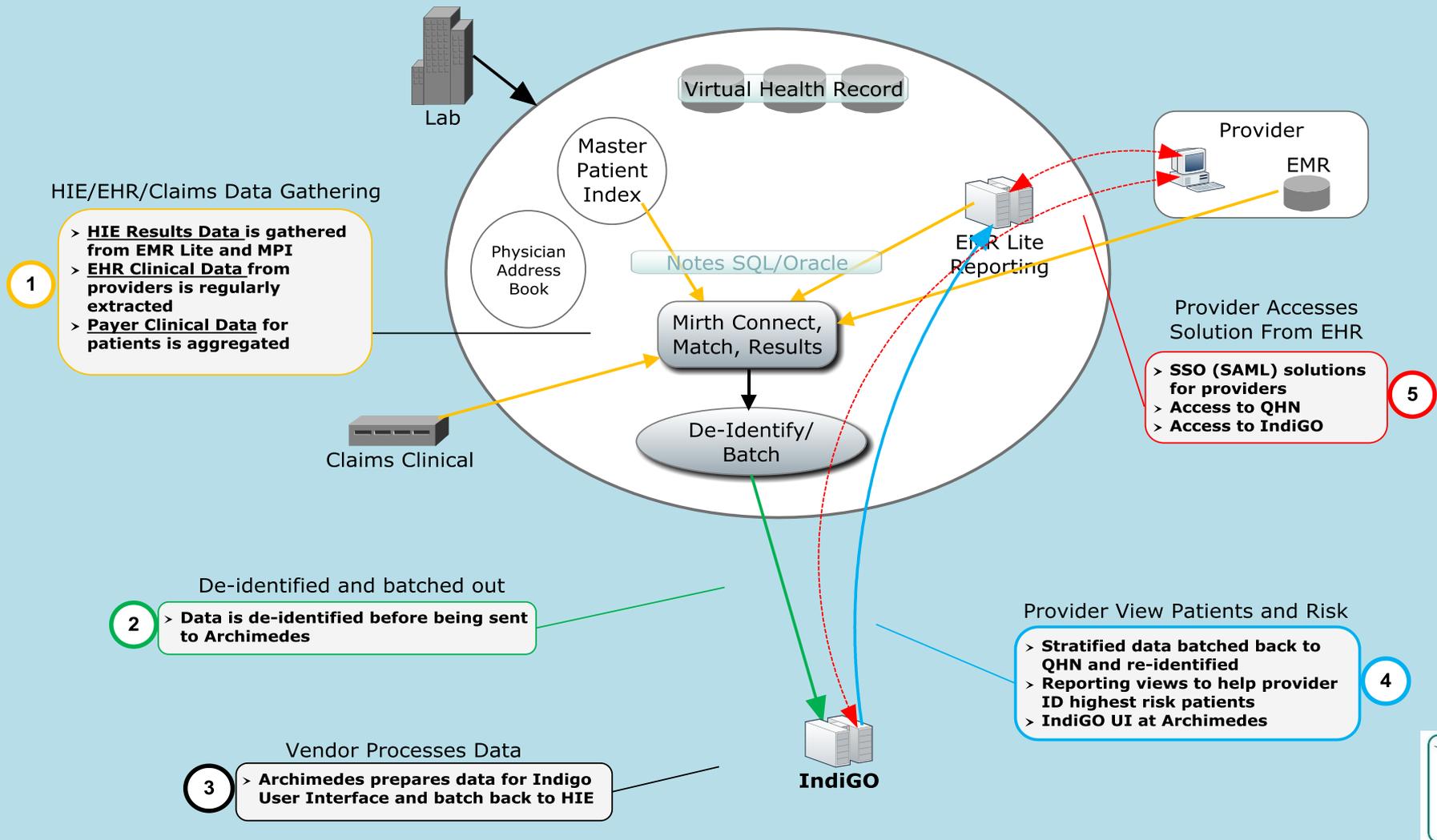
Inter-HIE Connectivity



The Big Picture



Smaller-Scale Example – Risk Stratification





Module 3A: Connecting Providers and Managing High-Risk Patients

Marc Lassaux, Technical Director
Colorado Beacon Consortium
mlassaux@qualityhealthnetwork.org

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